

**Review Articles**

**Book Reviews**

**Digests**

**Abstracts**

**Events and Comments**

*Rehabilitation Literature* is intended for use by professional personnel and students in all disciplines concerned with rehabilitation of the handicapped. It is dedicated to the advancement of knowledge and skills and to the encouragement of cooperative efforts by professional members of the rehabilitation team. Goals are to promote communication among workers and to alert each to the literature on development and progress both in his own area of responsibility and in related areas.

As a reviewing and abstracting journal, *Rehabilitation Literature* identifies and describes current books, pamphlets, and periodical articles pertaining to the care, welfare, education, and employment of handicapped children and adults. The selection of publications listed and their contents as reported is for record and reference only and does not constitute an endorsement or advocacy of use by the National Society for Crippled Children and Adults.

The National Society for Crippled Children and Adults does not stock for sale publications indexed in *Rehabilitation Literature*. List prices and addresses of publishers are given for information only. Copies should be obtained directly from the publisher or through local bookstores. Known addresses of authors of periodical articles follow their names.

Books for review and correspondence relating to feature articles and other editorial matters should be addressed to the editor. He will welcome your suggestions.

# REHABILITATION LITERATURE

---

## CONTENTS

November, 1959, Volume 20, No. 11

	Page
Article of the Month	322
Amputee Needs, Frustrations, and Behavior, by Sidney Fishman, Ph.D.	
Equipment	330
Reading Aids for the Handicapped, compiled by Dorothy E. Nieman	
Events and Comments	334, 352
Digests of the Month	335
Emotional and Personality Development in Neuromuscular Disorders, by Marvin L. Blumberg, M.D. In: <i>A.M.A. J. Diseases of Children</i> , September, 1959	
The Placement Problem, by Clyde Gleason, Ph.D. In: <i>Proceedings, Institute on Placement, February 1 Through 4, 1959, San Francisco State College</i>	
Book Reviews	339
Abstracts of Current Literature	341
Author Index	Inside back cover

---

Earl C. Graham, Editor  
Published Monthly by  
National Society for Crippled Children and Adults, Inc.  
2023 West Ogden Avenue, Chicago 12, Illinois  
Dean W. Roberts, M.D., Executive Director  
Subscription rates: \$4.50 a year, United States; \$5.00 a  
year, other countries. Single copy: 50c, United States;  
60c, other countries.

Address changes must be received by the 10th of the  
month to take effect the following month.

Second class postage paid at Chicago, Illinois.

Copyright 1959 by the National Society for Crippled  
Children and Adults, Inc., Chicago.

# REHABILITATION LITERATURE

---

## Article of the Month



### About the Author . . .

Dr. Fishman received his M.A. (1940) and Ph.D. (1949) from Columbia University, his doctoral dissertation being on self-concept and adjustment to leg prosthesis. From 1940 to 1947 he worked in the areas of personnel research and clinical psychology with the U.S. Army, the U.S. Employment Service, and the War Department. Currently Dr. Fishman is Senior Research Scientist, Research Division, College of Engineering, New York University (serving as Director of Prosthetic Devices Studies); Director, Prosthetics Education, New York University Post-Graduate Medical School; and Adjunct Professor of Psychology, Fairleigh-Dickinson University, Rutherford, N.J. Dr. Fishman is a member of the American Association for the Advancement of Science, American Personnel and Guidance Association, American Psychological Association, Kappa Delta Phi, National Rehabilitation Association, and the New York Academy of Sciences. He is presently Treasurer, National Council on the Psychological Aspects of Disability, American Psychological Association; a member of the Committee on Prosthetic Research and Development and the Committee on Children's Prosthetic Problems, both of the National Research Council; and a member of the Committee on Amputee Rehabilitation Centers, New York City Department of Health.

*This original article was written especially for Rehabilitation Literature.*

## Amputee Needs, Frustrations, and Behavior

Sidney Fishman, Ph.D.

Amputations are most frequently viewed in terms of the amount of physical loss involved. The functional consequences of the varying amounts of physical loss related to above-elbow, above-knee, below-elbow, and below-knee amputations are real and measurable, and theoretically it should be possible to make reasonable predictions concerning the amount of function that can be restored on the basis of the extent of physical amputation, the individual's physical condition, and the adequacy of the prosthetic appliance. However, this is not always true.

### Perception of Disability

In many instances, predictions based upon these physical considerations prove to be quite inaccurate, overshadowed as they are by a psychological factor, namely, the patient's individual perception of his disability. It is this perception, in many instances, that has a greater influence than the physical extent of the disability on the rehabilitation process and its result. Another term for *perception* of the disability is *estimate* of the disability, which consists of the mental picture of the consequences of the disability as it appears to the amputee himself. It may be considered the personal meaning of the loss to the individual and the major influence of the person's self-concept.

It is most unusual to find this perception an accurate one. In most cases, relatively unrealistic and distorted self-perceptions result. This is not a surprising assessment since the patient does not normally have access to any considerable experience with amputees. He does not know what to expect in living as an amputated person, and, in view of the rather significant trauma associated with his loss, he tends to focus his anxieties on the amputation and to consider the disability a more central factor in his future life than is realistic. In view of these considerations, it is perhaps more correct to say that a person "must learn to live with his perceptions of his disability" rather than "with his disability."

Since the amputee acts in terms of his perceptions, and not necessarily



reality, the consequences of a highly distorted estimate of one's disabled condition are reflected in the increased difficulty in accepting the challenges of the rehabilitation process. If these perceptions are not corrected prior to the prescription and fitting of an artificial limb and training in its use, these latter processes are almost impossible to accomplish successfully. When they do proceed, however, they do so only haltingly and with great resistance and difficulty.

It seems therefore that, in the rehabilitation process, we are as much concerned with trying to effect a change in the individual's perceptions as we are in trying to change the realities themselves. If this be the case, the treatment of the amputee assumes two foci: (a) diminution of physical loss by appropriate medical care and introduction of prosthetic devices and training in their use; and (b) revision of unrealistic ideas and attitudes through continuous re-education. Both these approaches are designed to increase the effectiveness of the patient's functional and psychological resources.

#### Amputee Needs\*

Having indicated that the problems of being an amputee arise from both physical and psychological considerations, it seems appropriate to identify specifically the areas of human behavior and functioning in which these difficulties manifest themselves.

It is sometimes overlooked and seldom fully appreciated that every human being has a diversity of needs of varying intensity that must be satisfied to maintain his adjustment to the environment. These needs may be considered as being either biogenic or sociogenic in nature. Examples of the first type relate to those evolving from the biology of the organism such as hunger, sexual desire, avoidance of pain, while examples of the latter relate to those that evolve from our social structure such as needs for status, achievement, and respect. Although the terms motive, drive, desire, and need have certain technical differences in meaning, for the purposes of this discussion, we will overlook these differences and will consider these terms as being synonymous. Because of the intimate and complex overlapping, it becomes fruitless to speak of an amputee's physical and psychological needs separately, since the problems involved tend in most instances to become combinations of both factors in an almost indivisible manner.

The thesis that I should like to propose is that a number of very specific psychological, social, and physiological human needs are thwarted when one becomes

physically handicapped as a result of amputation and, because of the permanency, finality, and irrevocability of the loss, a unique readjustment problem evolves. Only when the limitations imposed by the amputation are realistically accepted and integrated by the individual, does the adjustment process proceed. The significance of each one of these frustrated human needs is great and deserves detailed identification. These needs are as follows.

#### A. Physical Function

Although the psychological satisfactions concomitant with physical activity have not been clearly detailed or understood, it is clear that there is an inborn drive to use one's physical resources. This is evidenced by the baby's unlearned determination to walk, crawl, and handle things and the child's and adult's natural participation in physical activities. Although we have some difficulty in precisely defining the nature of this drive for physical activity, it is perfectly clear that associated with it are significant psychological satisfactions and that, with amputation, the need for these gratifications associated with physical activity is inhibited.

In addition to the gratifications evolving directly from the use of one's physical faculties (as in walking, dancing, or engaging in sports), there is a host of additional satisfactions that can be achieved only through the use of prehensile or ambulatory function as an intervening step. In this latter instance, the pleasures do not grow out of the physical activity itself but from the results of its application, such as in climbing to the balcony of a theatre, holding a drink, or going to lunch in a desirable but somewhat inaccessible place.

In approaching physical tasks, both for the direct satisfactions involved and for the related pleasures, the alternatives open to the amputee are (a) to avoid performing the task, (b) to compensate for his loss by the greater use of the remaining extremities, (c) to perform the function by utilizing an artificial replacement for the missing member, or (d) a combination of all of these. But no matter which course the amputee chooses, his desire to perform a variety of physical acts without restriction, limitation, or special consideration remains frustrated.

#### B. Cosmesis

1. *Visual Considerations.* The word cosmesis, which Webster's Dictionary defines as pertaining to adornment, beautification, or decoration, is widely used in the field of prosthetic restoration as a synonym for problems associated with one's visual appearance.

It is perfectly clear that, when one suffers an amputation, his overt appearance is changed, both in his own eyes and in the eyes of others. It is interesting to note that there is a group of disabilities, similar to amputation, which have this external badge attached to them. All

\*This paper is primarily concerned with unilateral amputations of noncongenital origin in the adult. The discussions would be applicable to child amputees or to bilateral or other special amputee types only with appropriate modification. Furthermore, we are concerned with the long-range permanent adjustment patterns of the amputee and are viewing him after the period of immediate postoperative shock has passed.

## ARTICLE OF THE MONTH

people afflicted with this kind of disability are automatically identified as being different. Of course, the majority of diseases are primarily internal in nature and may be completely secreted unless the individual cares to confide in someone concerning his illness.

These "external" disabilities all tend to set up a single problem related to the fact that we live in a society where great emphasis is placed on the quality, adequacy, and conformity of one's physical appearance. There are all sorts of evidences for this fact; we all tend to groom ourselves according to a pattern—great emphasis is placed on dress and make-up—automobiles and homes are all designed with good looks as a predominant goal.

It is clear that the values associated with appearance are important and, when members of our society do not meet these standards, they are regarded differently. Since the need to have one's appearance congruent with that of the group is a significant one, a problem develops.

It is interesting to point out in this connection that at least one important surgical technic (*e.g.*, cineplasty) for the prosthetic rehabilitation of the upper extremity amputee has never received the acceptance here in the United States. We may attribute this lack of enthusiasm in considerable measure to the cosmetic problems associated with this surgical procedure, since there is little question about its functional adequacy.

2. *Auditory Considerations.* Although the primary cosmetic problem for the amputee is the adequacy of his visual appearance, there are also frustrations connected with the noise-producing characteristics of the conventional prosthetic device. For lack of a more suitable method of referring to this latter problem, I propose thinking of it as the auditory aspects of the cosmesis problem. Since the prospect of being conspicuous by virtue of some inadequacy in one's make-up is a threatening one, the matter of adapting to a substitute extremity that produces noise becomes an additional cause for concern.

An artificial limb is essentially a simple machine, and, as one considers the matter, most man-made machines have some type of sound associated with them—the artificial limb is no exception. Some amputees will be concerned with noise caused by air escaping around the brim of the socket or in the articulation of the prosthetic knee or ankle. Others are even sensitive to the atypical sound of the prosthetic foot hitting the floor. Upper extremity amputees may react to the noise associated with the prosthetic elbow locking in position or the terminal device closing on an object. It is important to point out that these noises are on a very low level of intensity and probably go unnoticed by most people with whom the amputee associates. However, a very significant percentage of the amputees are aware of these sounds and because of this awareness tend to believe that other people are conscious of them.

Since cosmetic values, both visual and auditory, are

threatened by amputation and attendant prosthetic restoration, the need for minimizing another area of difference resulting from disability is frustrated.

### C. Comfort

Certainly a basic difficulty in adjustment stems from the body's need to be as free from pain and tension and as physically comfortable as possible. It is not ordinarily pointed out, however, that all prostheses are inherently uncomfortable appendages. I should hazard a suggestion that even the most skillfully made prosthesis cannot be considered really comfortable and cannot be taken for granted by the wearer. What we have come to regard as a comfortable prosthesis is simply one that offers a minimum and tolerable degree of discomfort.

Although not widely expressed, the above point of view should not be surprising since, in fitting a prosthetic device for the lower-extremity amputee, tissues and muscles are being used for functions quite different from their normal use, *i.e.*, primarily weight-bearing. Until the tissues become acclimated, desensitized, and/or calloused to these new functions, considerable discomfort, as a result of skin irritations, pressure points, and the like, is the rule. Even after prolonged periods of prosthetic usage, the desensitization is not complete and some discomfort is continuous. Although the problem of weight-bearing does not exist in the case of devices for upper-extremity amputees, the musculature is still used for unusual functions, *e.g.*, humeral flexion or scapula abduction for prehension or elbow flexion, humeral extension and/or abduction for the control of the elbow. For both lower- and upper-extremity amputees, the body tissues are encased in relatively rigid, impermeable materials (wood or plastics) that interfere with normal ventilation of body parts and also cause discomfort due to heat and perspiration.

The ability of the amputee to tolerate the various degrees of discomfort is connected with the wide variation in individual capacities to tolerate pain. It is well known that this ability to tolerate pain and/or discomfort is dependent upon both physical and psychological considerations, although the exact importance of each in the case of an individual patient is oftentimes difficult to ascertain. In any event, the fact that an amputee must continuously tolerate some discomfort and/or pain tends to violate his need for bodily security and absence of tension and thus develops into another problem area for the individual.

### D. Energy Costs

Although research has not yet given us final, reliable data concerning the amount of energy expended in typical tasks by the various types of amputees as compared to normals, preliminary studies tell us that these differences are significant. For example, an above-knee amputee per-

forming a given ambulatory task expends considerably more energy than does his nonhandicapped counterpart.

Since the evidence indicates that the amputee is called upon to expend more effort and energy, he is in the position of having to divert effort that once went to other activities and apply it toward his disability. He is also likely to experience fatigue more rapidly than the nonhandicapped person. Since both phenomena (expenditure of effort and the early experience of fatigue) are alien to the desire of most people, we once again have a significant instance of need frustration.

Another aspect of this problem is concerned with the fact that the operation of prosthetic devices is for the most part *not* automatic. In other words, the amputee needs to pay considerable continuous attention to the activation, control, and use of his prosthesis. This requirement for increased attention may be viewed as making greater demands on the psychological resources of the patient. It serves to divert his attention from other concerns and to focus attention on the problems of prosthetic function. We cannot translate this at the moment into terms of physical energy. However, its role as an additional and consistent drain on the amputee's resources cannot be argued.

#### E. Achievement

It may be pointed out that our society has relatively unsympathetic attitudes toward people who fail in the process of performing various activities, whether this be in the realm of school, vocation, sports, or social affairs. Failure in a business, in a spelling bee, an error in a ball game, or failure to get ahead in one's job are all subject to society's criticism.

The use of a prosthetic appliance, however, inevitably implies a reasonable amount of failure as an outgrowth of two facts. Bearing in mind that the prosthesis is a machine: (a) any inadequacy in the design or construction of its parts and/or fitting to the amputee will cause a failure in function; (b) unless the artificial limb is perfectly controlled by the amputee, it again will fail to provide proper function.

In view of these conditions, the amputee, especially the new wearer, must anticipate a reasonable number of instances when he will fail in the simple act of ambulation by falling down or will fail in the simple act of prehension by having something drop from his artificial hand. These failures of essentially elementary human functions are a source of concern and embarrassment for the individual. Even when the individual becomes expert in the use of the artificial appliances, a reasonable possibility of malfunction and failure always exists. Depending upon the individual's need for presenting an appearance of perfection to his peers, this anxiety concerning public failure further tends to inhibit the person's proper use of the appliance.

#### F. Economic Security

Any threat to an individual's ability to earn his own way in our competitive society must also be considered as a threat to an important human need. Our understanding of this problem may be aided by referring to the so-called socioeconomic scale, which in a general way categorizes people in terms of the social status accorded them. Generally, an individual's position on the scale is intimately tied in with his occupational pursuits.

Some insight concerning the amputee's economic problem may be gained by referring to this "scale." One notes that the occupations that are highest in status are professional, managerial, and executive in nature, while those that are lowest are termed unskilled labor. It is further to be noted that the duties of the professional and the executive group are primarily dependent upon intellect and personality (ability to think, speak, write, persuade, or make decisions), while those in the unskilled group are primarily dependent on manual resources (carry, pull, push, stack, or load). As a consequence, the potential employability of an amputee depends on the extent to which the individual is involved in intellectual or manual contributions to society.

When people in the former group suffer an amputation, there are perhaps no significant threats based on economic considerations at all. With the exception of the small group in the performing and fine arts, their ability to pursue their occupation is essentially unaffected, as is their position as a wage earner. The only economic problems faced by this group are the medical and prosthetic expenses associated with a chronic illness. On the other hand, those who earn their livelihood primarily by the performance of physical duties involving the use of hands and legs, and who do not have intellectual and personal resources for training in other fields, suffer a very severe economic handicap as a result of amputation.

The empirical fact is that the large majority of unemployed and marginally employable amputees come from this low socioeconomic group. They cannot compete with their full-bodied peers and, unless selective placement is introduced or special arrangements are made on the job, these people remain unemployable. We see then that, for this significant segment of the amputee population, the socially approved need to be economically self-sufficient is frustrated.

#### G. Respect and Status

Perhaps the single most important psychological prerequisite for a well-adjusted, productive life is the respect and the status that one earns from his associates and peers. Over and above the physical niceties and amenities of existence, the satisfactions received from the respect and affection of people close to them (friends, family, co-workers) are all important. With regard to the amputee population, this status is threatened and the possibility of



## ARTICLE OF THE MONTH

loss of acceptance by one's peers becomes very real. The amputee is not ordinarily obliged to guess how others feel about him. He can (except in the case of the congenital amputee) simply reflect upon what he thought about other handicapped people before he himself was afflicted. These attitudes, which he held toward other disabled people, are now directed toward the self.

It is likely that, early in these reflections, the word cripple comes to the amputee's mind along with its various connotations of inadequacy, charity, shame, punishment, and guilt. Obviously, when an individual views himself or feels that he is being viewed by others in these terms, he considers himself an object for lessened respect and will react to this changed social status accordingly. Since these attitudes are not at all likely to enhance the self-concept, but rather devalue it, the patient may be expected to undertake defenses against these attacks on his integrity.

Social prejudices with regard to the disabled are further reflected in our literature with such villainous characters as Captain Hook, Captain Ahab, Long John Silver, and others being identified with amputation. These characterizations tend to continue unsatisfactory attitudes toward the handicapped by virtue of their influence on youngsters during their formative years.

It is, of course, true that there are very significant educational programs afoot attempting to change the social attitudes toward the handicapped and teaching that the loss of an extremity does not automatically devalue a person. However, attitudes toward the disabled that have been centuries in the making are not changed by one or two lectures at the outset of a rehabilitation program. For the time being, we must face the reality that significant loss of social status accompanies amputation and that the human need to retain the respect of one's associates is threatened.

The seven above-listed human needs seem to be thwarted when one becomes an amputee and a potential wearer of a prosthesis. The conflicts and frustrations consequent to these considerations cannot be erased. They perhaps can be modified, perhaps can be compromised, but cannot be negated. The problem of rehabilitation of the amputee becomes, therefore, one of assisting the patient to incorporate these limitations into his pattern of life so as to assure minimal interference with the large variety of other functions and activities of living.

It would, of course, in planning a rehabilitation program for amputees be most helpful to determine which of the above seven problem areas are most important. If this decision could be made reliably, emphasis and attention could be paid to the more important aspects of the patient's problem. This is not possible, however, and the difficulty may be attributed to the following. First,

with relation to the seven problem areas discussed, a different pattern of significance emerges for each patient, depending upon his personal characteristics and background. Second, prosthetic devices are products that have evolved from a long series of significant compromises in design and, as a result, assist in reducing a number of problems but do not completely resolve any one of them. In the reduction of certain problems (cosmesis, function) new ones are introduced or old ones aggravated (comfort, energy costs).

Wherever one is concerned with human behavior, the often expressed thought that each patient must be treated in terms of his own system of values remains uppermost in one's thinking. The proper weighing of each of the above seven factors as part of the process of diagnosis and prognosis for each patient is a prerequisite in developing a sound differential management concept.

### Consequences of Frustration

The previous discussions have dealt at some length with the number of significant human needs that cannot be completely gratified, as a result of the loss of an extremity. We have suggested that these circumstances tend to frustrate the individual and to generate psychological conflict because of permanently unobtainable goals. Furthermore, it has been pointed out that the extent of conflict is more dependent upon the patient's perception of his disability than its real limitations. Consequently, the more inaccurate the patient's perceptions are, the greater the anticipated psychological distress.

Conflict and frustration are theoretical ideas that have been developed to explain the processes of human adjustment. These constructs are best identified and understood in terms of their causes (which are the unobtainable goals) and their consequences (which are the emotional reactions they induce). As a matter of fact, if no emotion is aroused it may be said that there is no frustration or conflict. Psychologists further tell us that the emotions resulting from conflict and frustration are not of the positive variety (love, affection, joy), but rather of a negative quality (anxiety, fear, jealousy, hate).

In order to re-establish equilibrium within the person, the negative emotions being experienced must be dissipated. This is normally accomplished through the vehicle of some variety of overt or covert behavior. The type of behavior resulting seems to be dependent upon three factors: (a) the way the individual perceives or interprets the situation; (b) the intensity and variety of the emotions experienced; and (c) the individual's adjustive habits and mechanisms. As we have indicated previously, the overt behavior exhibited is dependent to a considerable extent upon how the patient appraises himself and the situation in which he finds himself.

As a result of the frustrations involved, the emotions aroused may be fairly specific ones such as fear, hostility,

or shame, or they may be quite unprecise and diffused such as generalized anxiety or tension. Strong negative emotions like anger and fear tend to be expressed rather directly through overt behavior, while less strong and less specific emotions tend to be more easily inhibited. In any event it is not likely that all the amputee's strong tensions will be relieved through the expression of any single type of emotional response.

The ultimate behavior exhibited by the individual is also modified by his previously learned adjustive patterns. As a consequence, he may express his emotions freely, modify or inhibit expression, or utilize substitute reactions—the so-called defense mechanisms, such as compensation, rationalization, projection, and identification.

The manner in which people respond to disaster, the death of a loved one, the destruction of their home, or the illness of a child, varies in a myriad of ways. Similarly, the reactions to amputation tend to follow the same variable pattern. In the light of present knowledge, the most that can be said is that the method of adjusting psychologically to an amputation is primarily a function of the preamputation personality and psychosocial background of the person. We therefore see amputees who display behavior typified by depression, resentment, anxiety, defiance, resignation, indifference, perfectionism, impulsivity, dependency, aggression, or withdrawal. As a matter of fact, almost any type of behavioral response can be seen following the expected frequencies of normal, neurotic, and psychotic behavior in the population as a whole.

For the purpose of simplicity, the entire process may be charted as follows:

Amputation/Perception of Amputation→"Needs"→  
Frustration→Emotional Reaction→Defense Mechanisms, Adjustive Habits→Covert or Overt Behavior.

(It is interesting to note that only the first and last steps in this process ["amputation" and "overt behavior"] are apparent to the unsophisticated observer—yet the interim considerations must be recognized and dealt with if the patient is to be rehabilitated.)

The psychological process described above may well result in a diminution of the amputee's motivation to regain his lost functions and willingness to compromise to unnecessarily limited restorative goals. The consequences of poor motivation are particularly devastating in this instance because the amputee is called upon over and over again to expend greater effort and energy than is normally demanded of a nonhandicapped person for the accomplishment of the task at hand. Also the variety of "secondary gains" that society makes available to certain groups of amputees tends to curtail further the necessary expenditure of effort.

The empirical evidence verifies the theory, in that the single most important problem facing the rehabilitation worker concerns the ways and means of implementing

the marginal motivational and rehabilitational patterns of so many patients. Since the rehabilitation process is clearly re-educational in nature (and since it is properly said that no one can teach, only create a situation that is conducive to learning), the question arises as to what type of management procedures will help stimulate the patient's learning during the rehabilitation process.

### Suggestions

Seven important areas of human functioning were described as being frustrated by virtue of amputation, namely: (1) physical function, (2) cosmesis, (3) comfort, (4) energy costs, (5) achievement, (6) economic security, and (7) respect and status. It is clear that in order to assist the amputee, these seven reality problems, as modified by the amputee's perception of them, must be dealt with so as to diminish the frustrations and conflicts involved. A number of suggestions for doing this follow.

First, the actual process of physical restoration (providing a prosthesis with training in its use) assists the individual in partially meeting a number of his needs. When the amputee uses a prosthesis, he does not walk as well as a nonhandicapped individual, but his gait pattern more closely approximates that of the normal than it does when crutches are used. The prosthesis does not look exactly like the normal extremity; however, if properly fabricated it can meet the needs for good cosmesis to a great extent. The prosthesis will probably not be completely comfortable but can be designed to fit within the pain tolerance limits of the individual. The advantages obtained by restored function and appearance are most often sufficient to warrant the increased expenditure of energy on the part of the amputee. If he learns to utilize and control his prosthesis, the frequency with which it fails him diminishes. By appropriate rehabilitation counseling and placement procedures, the economic insecurity associated with re-employment can be reduced and, lastly, one learns to accept himself and thereby the attitudes of others.

Along with these real improvements in the amputee's situation goes the process of correcting and clarifying the patient's perceptions, so that he comes to understand what the goals of the rehabilitation process are, what he may anticipate in the future, and what he must learn to live with.

Therefore, the first rehabilitative step for the amputee may be said to begin with the actual process of prosthetic restoration and the continued verbal explanations thereof to the amputee.

A second significant approach revolves about the ability of the rehabilitation personnel to suggest substitute life goals in the place of those being pursued prior to amputation and around the patient's ability to accept these new goals. For example, if the patient's occupation prior to amputation involves considerable use of the affected extremity, one can achieve significant psychological progress



## ARTICLE OF THE MONTH

by providing training in another occupation that makes significantly lesser demands on the extremities and yet is equally appealing to the patient. When the substitute goal is offered and accepted, an important factor developing frustration and conflict is thereby eliminated.

Third, a problem frequently exists in preparing the patient to be amenable psychologically to the process of prosthetic restoration and to the acceptance of other rehabilitation goals. In the early postoperative stages an amputee may be viewed as undergoing an emotional re-

---

*Dr. Fishman's article has been reprinted and is available at 25c a copy. Please send payment with your order. Inquire for quantity rates.*

---

action not dissimilar to those of people who suffer the bereavement associated with the death of a loved one. In this latter instance, it is well understood that the emotional reactions of the bereaved operate in somewhat of a circuitous fashion that must be interrupted at some point if the individual is to re-enter normal life activities. The individual may not be permitted to "stew in the juice" of his own nonproductive emotions. Following the analogy, the circumstances dictate the involvement of the amputee patient in some purposeful activity at the earliest psychologically suitable moment, which will tend to divert him from a continuous preoccupation with his loss.

In this connection, the process of prosthetic training fulfills the extremely important function of involving the patient in challenging and important activities, so that the individual's preoccupation with his loss is reduced. In addition to the obvious primary purpose of prosthetic training—that of teaching one to use the prosthesis—the secondary purpose of requiring physical and mental concentration and involvement is significant. It is important to note that ordinarily only the occupational or physical therapist spends sufficient time with the patient to provide a continuous and important supervision and stimulation along these lines.

Fourth, a technic that is sometimes helpful in motivating the amputee patient involves placing him in contact with previously rehabilitated amputees. This is a particularly important procedure to be used with those amputees who find it impossible to relate to or identify with the nonamputated professional worker. In fact, he is unable to receive instruction or reassurance as a result of his attitude that no one who has not lost an extremity can really understand his situation.

In those instances, the use of previously rehabilitated amputees, as persons with whom the new patient may identify and from whom he may learn, cannot be overestimated. A word of caution must be made, however, concerning the qualifications of the amputee to serve as

a model. An individual of considerable quality and substantial personal adjustment must be used so that the new amputee does not simply become an outlet for the mentor's problems and anxieties.

Lastly, the continuous expression by rehabilitation personnel of appropriate concern, attention, reassurance, and respect tends to assuage the troublesome emotions being experienced by the patient. Negative destructive emotions simply do not flourish as well in an atmosphere typified by the professional climate described above.

These several suggestions, though by no means exhaustive of what can be done, should tend to reduce the frustration and conflict as well as the strength of negative emotions being experienced by the patient. In turn, the individual's motivation to restore himself as a functioning member of society will tend to increase.

### Criteria of Successful Rehabilitation

By what criteria can we gauge the success of the rehabilitation of an amputee? Does the answer lie in the apparent perfect restoration of lost function, or in the ideal cosmetic replacement, or in the most comfortable prosthesis? Partially, success lies in all of these, but it may, in some cases, exist with a minimum of these accomplishments.

We cannot expect the same standards of performance from patients of dissimilar physical and psychological characteristics. We can accomplish only that which the individual's preamputation physical and psychological potentials permit. It is therefore sometimes possible to have a more successful result in the rehabilitation effort with people who use their prostheses less, than with those who use them more.

In view of this fact, success in rehabilitation may be defined in terms of psychological rather than physical criteria. Rehabilitation may be said to be successful when the amputation and its related considerations are no longer the central adjustment problem for the individual. As the ability to use the prosthesis more automatically, or subconsciously, increases, as the client's awareness of being physically limited and different becomes less threatening, and as the amputation becomes a minimal source of interference in his life activities, the elements of successful rehabilitation have been approached.

### Bibliography

1. Abt, L. E., Some psychological factors in our service to the handicapped, *Orthopedic & Prosthetic Appliance J.* 2:8:17-27, Autumn, 1948.
2. Adler, A., *The neurotic constitution*. New York: Dodd, Mead & Co., 1926.
3. Barker, R. G.; Wright, B. A.; Meyerson, L.; and Gonick, M. R., *Adjustment to physical handicap and illness: a survey of the social psychology of physique and disability* (rev. ed.). Bul. no. 55. New York: Social Science Research Council, 1953.

4. Barker, R. G., The social psychology of physical disability, *J. Soc. Issues* 4:4:28-38, 1948.
5. Bender, L., Psychoses associated with somatic diseases that distort the body structure, *A.M.A. Arch. Neurol. and Psychiatry* 32:1000-1024, 1934.
6. Contini, R., and Fishman, S., ed., Contributions of the physical, biological, and psychological sciences in human disability, *Annals N.Y. Acad. of Sciences* 74:Art. 1, Sept. 20, 1958.
7. Cruickshank, W. M., ed., *Psychology of exceptional children and youth*. Englewood Cliffs, N.J.: Prentice-Hall, 1955.
8. Dembo, T.; Leviton, G. L.; and Wright, B. A., Adjustment to misfortune; a problem of social-psychological rehabilitation, *Artificial Limbs* 3:2:4-62, Autumn, 1956.
9. Dollard, J.; Doot, L. W.; Miller, N. E.; Mower, D. H.; and Sears, R. R., *Frustration and aggression*. New Haven, Conn.: Yale Univ. Pr., 1939.
10. Fishman, S., and Berger, N., The choice of terminal devices, *Artificial Limbs* 2:2:66-77, May, 1955.
11. Fishman, S. (and Staff), *The clinical treatment of juvenile amputees, 1953-1956*. New York: Research Div., College of Engineering, New York Univ., 1958.
12. Fishman, S. (and Staff), *The functional and psychological suitability of an experimental hydraulic prosthesis for above knee amputees*. New York: Research Div., College of Engineering, New York Univ., 1953.
13. Fishman, S. (and Staff), *Management of the above knee amputee*. New York: Prosthetics Education, Post-Grad. Med. School, New York Univ., 1957.
14. Fishman, S., The principles of artificial-limb evaluation, p. 775-793 in *Human Limbs and Their Substitutes*, P. Klopsteg and P. D. Wilson, ed. New York: McGraw-Hill, 1954.
15. Fishman, S., Research implications, Upper Extremity Field Studies, *Artificial Limbs* 5:2: (Chapter 4), Autumn, 1958.
16. Fishman, S., *Self-concepts and adjustment to leg prosthesis* (Doctoral thesis). New York: Columbia Univ., 1949.
17. Fishman, S., *Some facts and opinions concerning amputees; a questionnaire survey*. New York: Research Div., College of Engineering, New York Univ., 1950.
18. Fishman, S., Studies of the upper extremity amputee; educative implications, *Artificial Limbs* 5:1:88-93, Spring, 1958.
19. Fishman, S., ed., Upper extremity prosthetics research program, *Artificial Limbs* 5:1 & 2, Spring & Autumn, 1958.
20. Garrett, J. F., Applications of clinical psychology to rehabilitation, p. 443-449 in *Progress in Clinical Psychology*, Vol. 1, Section 2, D. Brower and L. E. Abt, ed. New York: Grune & Stratton, 1952.
21. Garrett, J. F., ed., *Psychological aspects of physical disability*. Off. of Voc. Rehabilitation, Rehab. Serv. ser. no. 210. Washington, D.C.: Govt. Print. Off., 1952.
22. Gellman, W., Roots of prejudice against the handicapped, *J. Rehab.* 25:1:4-6, 25, Jan.-Feb., 1959.
23. Haber, W. B., Effects of loss of limb on sensory functions, *J. Psych.* 40:115-123, 1955.
24. Healy, W.; Bowers, A. M.; and Bronner, A. F., *Structure and meaning of psychoanalysis*. New York: Alfred A. Knopf, 1930.
25. Hughes, J., and White, W. L., Amputee rehabilitation; emotional reactions and adjustments of amputees to their injury, *U.S. Navy Med. Bul.* (supp.), p. 157-163, Mar., 1946.
26. Kammerer, R. C., An exploratory study of crippled children, *Psych. Record* 4:47-100, 1940.
27. Kessler, H. H., *Rehabilitation of the physically handicapped* (rev. ed.). New York: Columbia Univ. Pr., 1953.
28. Kransdorf, M.; Fishman, S.; and Lifton, W., Study of amputee acceptance of prosthetic devices, *J. Phys. and Mental Rehab.* 4:1:17-19, Feb.-Mar., 1950.
29. Krech, D., and Crutchfield, R., *Theory and problems of social psychology*. New York: McGraw-Hill, 1948.
30. Ladieu, G.; Hanfmann, E., and Dembo, T., Studies in adjustment to visible injuries; evaluation of help by the injured, *J. Abnormal and Soc. Psych.* 42:2:169-192, Apr., 1947.
31. Landis, C., and Bolles, M. M., *Personality and sexuality of the physically handicapped woman*. New York: Paul B. Hoeber, 1942.
32. Lewin, K., *Principles of topological psychology*. New York: McGraw-Hill, 1936.
33. Meng, H., Zur Socialpsychologie der Korperbeschadigten: Ein Beitrag zum Problem der Praktischen Psychohygiene, *Schweizer Archiv fur Neurologie und Psychiatrie* 40:328-344, 1938.
34. Meyerson, L., Physical disability as a social psychological problem, *J. Soc. Issues* 4:4:2-10, 1948.
35. Meyerson, L., Special disabilities, p. 437-457 in *Annual Reviews of Psychology*, Vol. 8, P. R. Farnsworth and Q. McNemur, ed. Palo Alto, Calif.: Annual Reviews, 1957.
36. Murphy, G., *Personality; a biosocial approach to origins and structure*. New York: Harper & Bros., 1947.
37. Randall, G. C.; Ewalt, J. R.; and Blair, H., Psychiatric reaction to amputation, *J. Am. Med. Assn.* 128:645-652, June 30, 1945.
38. Rogers, C. R., *Client-centered therapy*. New York: Houghton Mifflin, 1950.
39. Rosenzweig, S., An outline of frustration theory, Chapter 11 in *Personality and the Behavior Disorders*, J. McV. Hunt, ed. New York: Ronald Pr., 1944.
40. Sargeant, S. S., and Williamson, R. C., *Social psychology* (2d ed.). New York: Ronald Pr., 1958.
41. Schilder, P., *The image and appearance of the human body*. New York: Internatl. Universities Pr., 1951.
42. Seidenfeld, M. A., Applications of clinical psychology to physical handicaps, p. 430-442 in *Progress in Clinical Psychology*, Vol. 1, Section 2, D. Brower and L. E. Abt, ed. New York: Grune & Stratton, 1952.
43. Seidenfeld, M. A., Progress in rehabilitation of the physically handicapped, p. 266-294 in *Progress in Clinical Psychology*, Vol. 2, D. Brower and L. E. Abt, ed. New York: Grune & Stratton, 1956.
44. Seidenfeld, M. A., *Psychological aspects of medical care*. American Lecture ser. no. 44. Springfield, Ill.: Charles C Thomas, 1949.
45. Shaffer, L. F., and Shoben, E. A., Jr., *The psychology of adjustment*. Boston: Houghton Mifflin, 1956.
46. Shelsky, I., *The effect of disability on self-concepts* (Doctoral thesis). New York: Columbia Univ., 1957.
47. Sherif, M., and Sherif, C. W., *Outline of social psychology* (rev. ed.). New York: Harper & Bros., 1956.
48. Vineberg, S. E., Concerning job readiness, *J. Rehab.* 24:6:9-10, 23, Nov.-Dec., 1958.
49. White, R. K.; Wright, B. A.; and Dembo, T., Studies in adjustment to visible injuries; evaluation of curiosity by the injured, *J. Abnormal and Soc. Psych.* 43:13-28, 1948.
50. Wittkower, E., Rehabilitation of the limbless; a joint surgical and psychological study, *Occupational Med.* 3:1:20-44, Jan., 1947.
51. Wright, B. A., ed., *Psychology and rehabilitation*. Washington, D.C.: Am. Psychological Assn., 1959.

## Reading Aids for the Handicapped

Compiled by Dorothy E. Nieman,

Chairman, Subcommittee on  
Reading Aids for the Handicapped  
of the Audio-Visual Committee,  
American Library Association

This is a selective list of reading aids for the handicapped. All items included in the list have been checked. Where additional equipment is available, sources of supply and/or information have been given whenever possible.

The annual Conference of the American Library Association, held in Washington, D. C., in June, 1959, featured a special exhibit of equipment and aids for the handicapped reader. A checklist of reading aids, prepared at the request of the ALA Association of Hospital and Institution Libraries, was distributed at the conference.

The compiler, Miss Dorothy E. Nieman, is Librarian at the Veterans Administration Center, Wilshire and Sawtelle Blvds., Los Angeles 25, Calif.

We are grateful to Miss Eleanor Phinney, Executive Secretary of AHIL, and to Mrs. Grace T. Stevenson, Director, Office of Adult Education, for permission to publish the list in *Rehabilitation Literature*.

### LARGE PRINT BOOKS

Very often a patient can read without magnifiers or projectors if the print is sufficiently clear and large. The following lists are useful in selecting books with large print.

*General Catalog of Large Type Textbooks.* American Printing House for the Blind, 1839 Frankfort Ave., Louisville 6, Ky.

Matson, Charlotte, and Lola Larson. *Books For Tired Eyes.* 4th ed. 1951. American Library Association, 50 E. Huron St., Chicago 11, Ill. \$1.00.

### MAGNIFIERS (See also PROJECTORS AND READERS)

There are many types of magnifiers on the market, produced by various manufacturers, very similar in style and use to the ones listed below. They are usually stocked for sale by optical companies. Check local optical supply houses to see what may be available. The ones listed below are distributed by the American Foundation for the Blind.

*Adisco Illuminated Magnifiers.* American Foundation for the Blind, 15 W. 16th St., New York 11, N.Y.

These illuminated magnifiers come in several models. Because the lenses are illuminated, they give a larger, clearer, sharper image than a plain magnifying glass and are easier on the eyes. They are available in both battery and electric models. The electric models are useful in the library, while the battery models are suitable for use in wards of hospitals and institutions.

*Battery Model V14C.* \$6.00. This model operates on a flashlight battery. The lens measures 17/8 inches in diameter and gives a field of about 21 typewritten characters. Over-all length is 8¾ inches.

*Electric Model V15AC.* \$7.45. Same as above, except that this model may be plugged into any 110-120-volt electric outlet for prolonged periods of reading.

*Combination Model V15BC.* \$9.85. Same as Model V15C, except that an electrical attachment is provided that can be used instead of the flashlight when desired. The electrical attachment plugs into a 110-120-volt electric outlet.

*Magni-Focuser No. 10.* American Foundation for the Blind, 15 W. 16th St., New York 11, N.Y. \$8.00.

This may be used by those persons with close to

REHABILITATION LITERATURE



20/20 visual acuity. It has two diopter magnifying prisms, mounted on a black plastic eyeshade with an adjustable headband. It provides  $2\frac{1}{2}$  diameter of magnification and may be worn over standard corrective glasses. Its working distance is close, which some people find disturbing. Line of print can be followed by the normal movement of the head, instead of moving the magnifying lens, and this makes for an easier reading adjustment.

## PAGE TURNERS

Only two page turners have been included in this list, as they seem to be the most practical ones on the market at the present time. Both are electrically operated, without threads. Machines using threads and clips to turn the pages are not included, as the time needed to rethread the machines (usually every 50 pages) makes their use impractical in most hospital situations.

An experiment was made at the Alderman Library, University of Virginia, on the usefulness of page turners for a closed TV project. Machines were tested for prolonged periods under trying circumstances. The two machines listed below gave the most consistently satisfactory performances. See the following report for fuller information:

Bristol, Robert P. *Page Turners, A Report of Their Usefulness for a Closed-Circuit TV Project*. Alderman Library, University of Virginia, Charlottesville, Va. 1958.

A copy of this report is available in the files of the ALA Reading Aids for the Handicapped Subcommittee.

*Lakeland Automatic Page Turner*. Lakeland Products, 3024 Clinton Ave., Minneapolis, Minn. \$180.00 (110-volt, 60-cycle unit); \$197.00 (24-volt, 60-cycle unit).

Operated by electric switch. Turns forward only. An arm, with silicone plastic on the end, presses on page and turns it by pulling it to the left. A wire operates to hold the left page flat. The silicone plastic needs reshaping after each prolonged use of the machine. It may be replaced when too soiled. The size of the machine is 14 x 24 inches; weight 12 $\frac{1}{2}$  lbs.

*Turn-A-Page*. Hagman Enterprises, 2606 E. Glenoaks Blvd., Glendale 6, Calif. \$206.00.

Electrically operated by switch. Switch can be operated by a light touch of any part of the body that can move. Switches carry 25 volts. Once activated, switch need not be held down to carry through the action—the action will complete itself. It turns pages either forward or backward by means of an arm that rotates in a complete circle, drops onto a page, and turns it by pushing it. Pages are kept flat by a wire circle, which operates in conjunction with the rotating arm. Occasionally turns two pages at a time, but

this can be corrected by setting arm in motion in opposite direction and turning page back. Size of machine is 24 x 20 inches. Standard 110-115-volts, 50-60-cycle AC outlet.

For iron lung patients, a special mirror assembly is available. Mirrors are front-surface, astronomical type that produces a clear image. The accessory kit of mirrors, brackets, etc., is \$85.00.

## PROJECTORS AND READERS

*A-O Projection Magnifier (Magnavisa)*. American Optical Company, Instrument Division, Buffalo, N.Y. \$170.00.

This projector magnifier may be used to aid the partially blind in reading. It comes in two models, the 3X and the 5X. The 5X is more useful for library purchase, as this magnification can be used with more patients. Reading material is placed on a small, movable platform, the optical head is lowered and focused, and the magnified image is projected onto an illuminated 4 $\frac{1}{2}$  x 12 inch screen. It will cover the complete line of a single newspaper column or a narrow magazine column such as *Time*. It will not take in the entire line of a wide column such as *Life* or the line of a book—the tray must be moved back and forth to cover the line of print. This can prove very distracting to the average reader, so that only the more highly motivated patient would make use of the machine for reading lengthy articles or books. It would be useful, however, in reading the daily newspaper or magazines with narrow columns of print. If there is a need for a projection magnifier, this model would be more useful to the average library than the Megascop, which is designed for the person with a very high degree of sight impairment.

*Megascop Projection Reader*. American Foundation for the Blind, 15 W. 16th St., New York 11, N. Y. \$225.00. (12 or 25 diameter)

This projection magnifier can be used with those in the upper periphery of sight impairment. It is capable of magnifying telephone print into characters two inches high on an 8 $\frac{1}{2}$  x 9 $\frac{1}{2}$  inch screen. A plastic tray above the machine holds the material to be read. The material is placed face down on the tray, which can be moved by a bar extending across the front toward the bottom. A 150-watt bulb provides the illumination and is focused through the transparent tray onto the material. A reader must be very highly motivated to use this piece of equipment. It would be useful in a rehabilitation program, but not for the average reader, as it requires a re-education in reading habits.

*Projected Book Machine*. Projected Books, Inc., 313 N. First St., Ann Arbor, Mich. \$228.50.

## EQUIPMENT

This projector casts an enlargement of a filmed book on the ceiling. An adjuster lens is available that will project the image on a screen or wall at the foot of the bed, if the patient is able to sit up. The film may be moved either forward or backward by light pressure on a button on the control panel by any part of the body that can move.

In order to get a clear projected image, the ceiling must be of proper height to come within the focus of the lens. The surface should be smooth and without obstructions that would interfere with the picture, such as pipes, cords, light fixtures, and the like. When the ceiling is not suitable, a screen or sheet may be placed in a position to receive the image. Eye strain may result from using the machine for too long a period of time. Older patients with poor eyesight and those who use reading glasses often have difficulty in using the machine.

Some 1,330 titles are available on microfilm from Projected Books. Prices range from \$1.45 to \$5.00 per title. Not all titles are available in stock, but any title desired can be made up on request. Most of the copyright dates on titles are in the 1940's, with a few from the 1930's and earlier and the 1950's, plus a selection of the well-known classics. A complete list may be obtained by writing to Projected Books, Inc.

## READING STANDS

Reading stands satisfactory for most purposes can usually be purchased through local book and stationery stores. The specialized reading stands, designed especially for bed patients and handicapped persons, cannot be listed with any degree of certainty, as the market for them is apparently so small that they go out of production frequently.

Two stands are listed below. The Ponton Stand has been on the market for several years and is a good, all-purpose stand. The Book Butler, produced by the De Lebia Company, is not being manufactured at the present time but production is expected to resume shortly. Because it has some unusual features, it is included.

See also items listed under heading "HOME-MADE" DEVICES for easily constructed reading stands.

*Book Butler Reading Stand.* De Lebia Company, 727 Mariposa Ave., Los Angeles 5, Calif. Approx. \$8.00.

This stand is lightweight, with six possible positions, so that it can be adjusted to any reading height or position. It will hold the book directly overhead so that the patient may read while lying flat on his back.

*Ponton Reading Stand.* Replogle Globes, 325 Hoyne Ave., Chicago 12, Ill. \$8.25.

This stand is lightweight and can be adjusted to various heights, maximum height being 20 inches. It

latches on both sides so that it can be locked into position and may be used as a bed tray. It can be tilted to various angles for reading. Top measures 13 x 20 inches.

## READING GLASSES—PRISM

*Bedspecs.* Swift and Anderson, Inc., 952 Dorchester Ave., Boston 25, Mass. \$17.50.

These prism glasses are known under various trade names—Bedspecs, Prismatic Glasses, etc. They are usually available through local optical companies.

Prism glasses provide right-angle reading. A patient lying flat on his back or resting in a reclining position can read a book or magazine propped on the chest or abdomen. The glasses are optically correct and give a clear, slightly magnified image. They may be used over corrective glasses but are difficult to use over bifocals. Some patients have been able to wear their bifocals upside down with the prism glasses, but this is not always successful. Even with the limitation, prism glasses are a very useful and popular piece of equipment.

## TALKING BOOK MACHINES AND RECORD PLAYERS

The Library of Congress administers a program to provide talking book machines and records for qualified persons. These machines and records are produced under a government appropriation and are distributed free to individuals who qualify. Hospitals and institutions may qualify to purchase a Library of Congress talking book machine and to borrow talking book records for use with their patients. For complete information write to your State Library or, if it is not a distributing library, write to the American Foundation for the Blind, 15 W. 16th St., New York 11, N. Y., or to the Library of Congress, Washington, D.C. Commercial machines available are listed below.

*Libraphone*, 10 E. 44th St., New York 17, N. Y. "Sonette" Model, \$39.50; "Hi-Fi Orator" Model, \$59.50.

This machine makes talking books available to all patients, without restriction. It comes in two models, the "Sonette," for individual use, and the "Hi-Fi Orator," for individual or group use. The "Sonette" Model is lightweight (8 lbs.) and compact. It has four speeds and may be used with earphone jack or pillow speaker. It does not have an automatic turn-off. This model is excellent for the wards. The "Hi-Fi Orator" is slightly larger, weighing 13 pounds. It comes with earphone jack and has four speeds with two speakers. A multioutlet jack box, for six earphones, may be purchased for \$7.50 and is excellent for silent listening in the library or for groups on the wards. The earphones or pillow speaker cost



\$8.50. This company also has a 16-2/3-rpm turntable available, which can be used to convert a 33-1/3-rpm machine to play 16-2/3 records. The turntable adjuster is \$5.95.

Califone, 1041 Sycamore Ave., Hollywood 38, Calif. "Listening Corner" Model 12VJ8-9, \$139.50 (without headphones); "Audio-Center" Model 12MH8, \$179.50 (with set of 8 earphones).

The Califone company manufactures a wide variety of record players, but the ones of interest to librarians are the two models designed for undisturbed group listening. The "Listening Corner" model is a hi-fi transcription and record player with multiple outlets for eight sets of earphones. It has an automatic switch that disconnects the loudspeaker when the earphones are in use. It has four speeds and push-button pickup. It weighs 20 pounds. The "Audio-Center" model was designed exclusively for group listening. It features built-in compartments to house eight sets of earphones. The earphones have sanitary replacement cushions. Each set may be individually adjusted for volume. The model has four speeds and push-button pickup. It weighs 22 pounds.

These players have an excellent tone, for both musical recordings and spoken records. The smaller model may be used on the wards for listening groups, but for individual listening on the wards the smaller Libraphone model with the pillow earphone is much lighter and more practical. The Califone models are especially good for group listening in the library and may also be used as ordinary record players.

### TALKING BOOKS AND SPOKEN RECORDS

Listed below are some of the leading producers of spoken records. Complete catalogs of their recordings may be obtained by writing to the recording companies. *Schwann's Monthly Catalog*, a comprehensive listing of recordings of all companies, is carried by most record dealers and has a section devoted to spoken records. In addition to the companies listed below, which specialize in spoken records, most of the large recording companies such as RCA Victor, Decca, Columbia, MGM, and London produce some excellent spoken records.

The American Foundation for the Blind, 15 W. 16th St., New York 11, N.Y., publishes a recorded edition of *New Outlook for the Blind*, which includes an annotated listing of the new talking books produced for the Library of Congress and available for loan through various distributing libraries. *Talking Book Topics* is also published in Braille and inkprint editions.

For libraries acquiring records on a large scale, a record reviewing service is available: "Audiofile," Box 1771, Albany 1, New York. This company publishes record reviews on 3x5 cards. These cards are cross-indexed

to file alone or in the card catalog. Published 10 times a year, September through June, it includes about 400 cards per year. The cards supply a synopsis and appraisal of the record, suggest audiences and uses, and give label information. The service is edited by Max U. Bildensee and costs \$25.00 a year.

Audio Books Company, 501 Main St., St. Joseph, Mich.

Audio Books' *Literature for Listening* includes well-known literary favorites ranging from Shakespeare to Mark Twain, with a selection of children's classics. Audio also puts out the Talking Bibles—the complete New Testament in the King James version and the Catholic edition and the Old Testament. Audio records can be played on any 16-rpm recorder. They may be played on a 33-1/3-rpm player with the use of an adapter.

Caedmon, 277 Fifth Ave., New York 16, N. Y.

Caedmon's *Recordings of the Spoken Word* include some of the most outstanding spoken records on the market today. Selections include: Author's Own Recordings (over 40 writers and poets), Classics of the English Language (poetry, prose, plays), Children's Records, Biblical and Religious Recordings, Documentaries. Texts for many of the recordings are available at 35¢ each.

Enrichment Series, Enrichment Teaching Materials, 246 Fifth Ave., New York 1, N. Y.

Based on the Landmark Books series, published by Random House, these recordings are designed for grades 5-9 and for "reluctant learners in high school." They can also be used very successfully with selected groups of neuropsychiatric patients. They consist primarily of dramatizations of events in American history. A new series, recently added, is composed of readings of famous American documents, such as the Declaration of Independence and Patrick Henry's speech.

Folkway Records, 117 W. 46th St., New York 36, N. Y.

These recordings are designed as a teaching aid but can be used to good advantage by libraries. They include recordings on American literature, American history, Americana, international literature read both in English and in the original language, folk tales and stories, satire, religion, and language instruction. They also have selections of folk songs and rhythms. Libraphone, Inc., 10 E. 44th St., New York 17, N. Y.

This company plans to produce a full line of "talking books" similar to those put out for the Library of Congress program. So far they have produced 16 albums, in the following general categories: Travel-Adventure, Humor, Inspirational, Human Drama, Detective-Mystery, Romance, and Junior Favorites. Prices range from \$9.50 for 2-disc albums

## EQUIPMENT

to \$13.95 for 5-disc albums. Discount schedules and prepaid subscription rates are available.

*Spoken Arts*, 95 Valley Rd., New Rochelle, N. Y.

Spoken Arts has developed several series—Great American Artists, Informal Hour, Distinguished Teachers, Distinguished Playwrights, Distinguished Composers, and Golden Treasury of Verse. Selections are read by such outstanding persons as Jacques Barzun, Dr. Robert Hutchins, Dr. Frank Baxter, and Dr. Edward Teller among the teachers; Arthur Miller and Moss Hart among the playwrights; Siobhan McKenna among the great artists. A distinctive series.

## Events and Comments

### Correction

IN THE DIGEST section of the October, 1959, issue, page 306, of *Rehabilitation Literature* the date of publication of *The Practical Nurse in a Rural County* was reported erroneously as August, 1953, rather than as August, 1959, the correct date. We suggest that you make the correction in your copy of *Rehabilitation Literature*.

### Living with a Disability Available at ISWC

THE BOOK *Living with a Disability* by Howard A. Rusk and Eugene J. Taylor (Blakiston Div., McGraw-Hill Book Co., New York, 1953) originally available at \$3.50 may be purchased for \$1.50 from the International Society for the Welfare of Cripples, 701 First Ave., New York 17, N.Y.

### Revised Catalog of Films Available in Britain Published

A SECOND EDITION (August, 1959) is now available of *Films on Cerebral Palsy*, which gives details on 44 films available in Britain, some of which are of foreign origin. The catalog, compiled by the Scientific Film Association, London, England, for the National Spastics Society, 28 Fitzroy Sq., London, W.1, is published as a supplement to the Summer 1959 issue of the *Cerebral Palsy Bulletin*. Films may be borrowed from the distributors listed in the catalog. The article "The Movement of Films Between Countries," by Frank Bamping, in the Summer issue of the *Bulletin* offers helpful information that may facilitate passing films through national customs barriers.

### Research Reports from Denmark

THE DANISH National Association for Infantile Paralysis (Landsforeningen Mod Børnelammelse) has inaugurated periodic publication of research reports *Communications from the Testing and Observation Institute*. The most recent report, No. 4, 1959, is "Methods and Standards for Evaluation of the Physiological Working Capacity of Patients," by Erling Asmussen, Scientific Director of the Institute, and Sv. Molbech. Earlier reports, appearing in 1958 and 1959 are: 1, "Estimating the Relative Working Capacity of Housewives Doing Housework"; 2, "Muscular Asymmetries in Normal Children"; and 3, "General Lines in Designs of Dwellings for Handicapped Confined to Wheelchairs, Part 1." Copies of *Communications*, published in English, are available on request from the Danish Association, the address of which is Tuborgvej 5, Hellerup, Denmark.

### Progress in Conquest of Poliomyelitis Reported

AN ARTICLE by the Chief of the Epidemiology Branch, Communicable Disease Center of the U.S. Public Health Service, Dr. Alexander D. Langmuir, of Atlanta, Ga., titled "Progress in Conquest of Paralytic Poliomyelitis," was carried in the Sept. 19, 1959, issue of the *Journal of the American Medical Association*. The article reports the annual incidence of poliomyelitis in the United States, 1910 to 1958; the location of high incidence of paralytic cases of poliomyelitis in 1958; the weekly incidence in 1959 in comparison with 1958, 1957, and selected previous years; and conclusions drawn from the epidemiologic evidence.

### "HOME-MADE" DEVICES

Many simple reading aids are very easily constructed and can be made at home or by the occupational therapy or manual arts therapy department of the hospital. Plans and instructions for making these aids may be borrowed from the files of the Reading Aids for the Handicapped Subcommittee.

Among the aids for which construction plans are available are a headband page turner useful with cerebral palsy patients, a lapboard reading rack, a mouth stick page turner or lip wand for use by poliomyelitis patients, and a respirator reading rack.

### Appointments Made for Staff of House Subcommittee to Study Needs of Handicapped

DR. MERLE E. FRAMPTON, Director of the Special Education and Rehabilitation Study of the Subcommittee on Special Education of the U.S. House of Representatives Committee on Education and Labor (see news item, p. 288 of the September issue of *Rehab. Lit.*), has announced appointments to the Study staff. Robert Gates has been named Assistant Director and Elena D. Gall Assistant to the Director, in charge of field studies. Dr. Gates was formerly Assistant Director of Special Education of the Florida Department of Education. Dr. Gall is Assistant Professor of Education and Coordinator of Special Education at Hunter College. Other appointments are: Miss Alice B. Hartman as Assistant to the Director and Legal Counsel; Mr. Augustine Regis Kelley as Assistant to the Director and Special Legislative Consultant; Mrs. Olive M. Gibbons as Administrative Assistant; and Miss Margaret A. Mahoney as Secretary.

### Organizational Changes of Address

AMERICAN PERSONNEL AND GUIDANCE ASSOCIATION (National Vocational Guidance Association is a division). To: 1605 New Hampshire Ave., N.W., Washington 9, D.C.

MEETING STREET SCHOOL, CHILDREN'S REHABILITATION CENTER. To: 333 Grotto Ave., Providence 6, R.I.

REHABILITATION INSTITUTE OF METROPOLITAN DETROIT. To: 261 Brady St., Detroit 1, Mich.

(Continued on page 352)

*Journal articles, chapters of books, research reports, and other current publications have been selected for digest in this section because of their significance and possible interest to readers in the various professional disciplines. Authors' and publishers' addresses are given when available for the convenience of the reader should he desire to obtain the complete article or publication. The editor will be most receptive to suggestions as to new publications warranting this special attention in Digests of the Month.*

814

### Emotional and Personality Development in Neuromuscular Disorders

By: Marvin L. Blumberg, M.D. (98-120 Queens Blvd., Rego Park 74, N.Y.)

In: *A.M.A. J. Diseases of Children*. Sept., 1959. 98:3: 303-310.

The emotional and personality development of the child with neuromuscular disorder may differ greatly from that of normal children. The attitudes of others and his own toward his defects and his limitations modify the environmental and psychological factors influencing his maturation. Furthermore, the child may show perceptual defects and occasionally organic behavior disturbances as a result of brain damage.

Effects of neuromuscular disease have been discussed in the literature. Emotional dependency on parents or substitute parents tends to be prolonged by disturbances of equilibrium and motility. Spastic, athetoid, ataxic, and muscular dystrophic children present certain differences in emotional reactions to their disease. Body image concept and language ability and facility are often affected. The neuromuscular consequence of acute disease like poliomyelitis striking an older child has a very different impact on personality than does that of congenital chronic disorder.

Residual disabilities usually have their emotional impact as a child grows older. The severity of the emotional reaction may depend more on personality factors than on the severity of the deformity and disability. Intrinsic developmental factors have been stressed, but extrinsic environmental factors must be considered, for personality is the result of interaction of the person and his milieu. The afflicted person, his parents, and society relate. The lack of social experiences and perceptual deficits have a stultifying effect on intelligence and psychometric performance. Social acceptance may be jeopardized by behavior disturbance caused by brain damage.

The young child does not realize the extent or significance of his handicap. He has the opportunity to compare himself with normal siblings and other children but is slow to accept the concept of himself as deficient. He is aware of his disability but does not appreciate it or the

limitations it imposes. His aspirations are similar to the normal's and are based on his social exposures and experiences. As adolescence nears, the impact of reality begins to appear. As he grows older, the child is more aware of differences and may find it harder to relate to reality and to identify with normal children his own age. The struggle for normal maturation becomes intensified. The recognition of variance may lead to anxiety, frustration, and withdrawal. The child may even react aggressively against his environment or himself. It should be noted that frustration tolerance is diminished in many brain-damaged persons on an organic basis, regardless of emotional factors.

An inquiry was made that illustrated the difference in aspirations held by the young child and the adolescent. With the approach of adolescence and a growing consciousness of reality, plans for the future are often considered more practically, based on residual or rehabilitated ability. In a school unit for the cerebral palsied and others with severe neuromuscular handicaps, 25 children were used as subjects in the study. Sixteen were girls. All had had frequent, intimate contact with medical care and related modalities of therapy and had had experiences outside the home situation. They were asked individually, "What do you want to be when you grow up?" Their answers are summarized in the table (see next page). The 11 over age 10 showed introspection as well as environmental influence, except for an intelligent 11½-year-old girl with severe athetosis, who still wanted to become a nurse. Three girls did not know what they wanted to be.

Although this survey is brief and the analysis of data mainly qualitative, certain contentions are borne out. Several interesting conclusions may be drawn. The responses apparently do not correlate to intelligence or severity of disability. Aspirations expressed were influenced by life experiences, as with normal children. Those under age 10 expressed the usual ambitions of childhood, especially unrealistic because of disability, while the older largely showed transitional or more practical thoughts about their future careers. Chronological age seemed the most important factor in creating awareness of the implications of disabilities.

In adolescence, normally a time of ferment, emergence from the dependencies and protections of childhood is attempted, often with episodes of depression and emo-



# DIGESTS

## Factors Related to Future Ambitions of Children with Severe Physical Handicaps

CASE NO.	AGE	SEX	IQ	DIAGNOSIS	AMBITION	REMARKS
1	7	F	96	Athetosis	Nurse	
2	8	F	AH	Sp. quad.	Nurse	
3	8½	F	86	Sp. quad.	Nurse	
4	9	F	78	Sp. quad.	Nurse	
5	7	F	82	Sp. dipl. Meningomyelocele	Teacher	Repaired in infancy
6	8	F	69	Sp. quad.	Teacher	
7	6	M	79	Sp. quad.	Doctor	
8	8	M	117	Sp. quad.	Doctor	Father is physician
9	5	M	BA	Sp. dipl.	Daddy	
10	7	M	Av	Sp. quad.	Cowboy	
11	8	M	77	Sp. dipl.	Doughnut maker	
12	9	M	86	Sp. quad.	TV announcer	Unimpaired speech
13	5	F	120	Fl. dipl.	Does not know	
14	8	F	138	Sp. quad.	Does not know	
15	11½	F	104	Athetosis	Nurse	
16	12	F	79	Athetosis	Stay home, sew	
17	12½	F	80	Ataxia	Housewife	
18	14	F	77	Sp. quad.	Wanted nurse	Now realizes cannot
19	16	F	81	Sp. quad.	Telephone operator	Fairly good hands
20	10	M	104	Sp. dipl.	Wanted policeman	Changed mind, cannot
21	12½	M	135	Ten. ath.	Drummer in band	Encouraged by adult friend
22	16	M	87	Athetosis	Own business-Pony ring	Like uncle's business
23	10	F	121	Sp. quad.	Does not know	
24	10	F	77	Arthrogryposis	Does not know	
25	10	F	98	Ataxia	Does not know	Measles encephalitis

AH=average to high average; BA=below average; Av=average; Sp. quad.=spastic quadriplegia; Sp. dipl.=spastic diplegia; Fl. dipl.=flaccid diplegia; Ten. ath.=tension athetosis

tional storms. More difficult adjustment must be made by the handicapped. They are not yet physically or necessarily emotionally ready to develop independence. Social acceptance or even tolerance may become strained. Frustration felt by the family may increase along with the physical and financial burdens as returns apparently diminish. Coordinated effort by medical and social agencies and private practitioners is needed for early treatment and rehabilitation. The earlier the problems are recognized and evaluated and the earlier treatments and guidance are instituted, the better the chances for achieving integrated personalities.

*The A.M.A. Journal of Diseases of Children is published monthly by the American Medical Association, 535 N. Dearborn St., Chicago 10, Ill.; subscription rate \$12.00 annually (Canada \$12.50; other countries \$13.50; students, interns, and residents in U.S. and possessions, \$7.00); single copies 1.25.*

815

### The Placement Problem

By: Clyde Gleason, Ph.D. (Chief, Selective Placement, Bureau of Employment Security, U.S. Department of Labor, Washington, D.C.)

In: *Proceedings, Institute on Placement, February 1 Through 4, 1959, p. 7-20*, held in cooperation with the

Office of Vocational Rehabilitation, state vocational rehabilitation agencies, and state employment service agencies. 1959. 72 p. forms. Mimeo. San Francisco State College, San Francisco, Calif.

Helping the handicapped find work has a long history, but I am sure most of us can remember when we "flew by the seat of our pants," with little of the scientific about what we did. The principal requirements were devotion to the job, some acuteness in sizing up and dealing with people, some familiarity with local industry, and a circle of friends among employers. Out of soul-searching and analyzing of mistakes comes progress. And in recent years we have progressed. We have learned more about functional effects of disease and injury and have the means, although still crude, of translating medical data into terms of capacity for representative types of work and working conditions. We are doing more to capitalize on the client's psychological assets, using aptitude measures more frequently and intelligently, and we are beginning to assess personality, temperament, and interests in relation to job demands. We are developing technics for analyzing the demands of jobs in specific industries to find those in which workers with particular limitations will not be handicapped. The kinds of work suitable for those with specific disabilities are at least being sporadically surveyed. We are engineering jobs and devising prostheses that are aiding some to obtain work.

These and other lines of advancement are building stones for the foundations of a science and art of selective placement, a vital segment of vocational rehabilitation.

I believe that in 20 years automation and other forces operating in our economy will make suitable for *physically* disabled workers a larger proportion of all jobs. Mental burdens brought about by automation will not be met by those deficient in intelligence or emotional stability. The rehabilitation worker of the future must be better grounded in psychopathology and its vocational implications.

There will be more older people and more problems of aging. Because we will be in closer and more effective contact with schools and youth organizations there may be no big increase in the proportion of older to young clients. For some of today's incurables cures may be expected; new prostheses may reduce disabling effects. More numerous workshops for the very seriously disabled will gear activities more closely to those of industry; we must cooperate with workshops in helping persons make transitions into competitive employment.

Twenty years from now, the handicapped, along with the whole population, will become more mobile. They will not stay so close to home base. We shall become more effective in bringing geographically separated jobs and workers together.

Our clientele will have more difficult and elusive adjustment problems. The more complex and sensitive instruments that will be in general use for appraisal of the individual, for occupational exploration, and for the evaluation of specific employment opportunities will require of us more thorough backgrounds in psychology and related disciplines and rigorous training in their use. The full range of services will no longer be attempted by single individuals and seldom by single agencies. We must come to realize that sharing the total task gives each of us freedom to concentrate on what we can do best and that the final outcome of combined efforts—the welfare of one who needs help—is reward enough for everyone.

Considered as a pioneering movement, vocational rehabilitation has been carried on with high purpose and gratifying results in certain areas of activity. However, we have tended to bypass and neglect certain areas of disability. For example, most of us I suspect place in the difficult category the cerebral palsied, the older cardiac, the postpsychotic, the chronic alcoholic, the mentally retarded, the totally deaf, the totally blind, the wheel chair paraplegic, the grand mal epileptic, the multiple sclerotic, and the double amputee. If we should decide to concentrate on the "hard core" case in which special services can help, what is the best division of labor among the agencies to provide the services?

During a week-long session held last summer at Pennsylvania State University, 25 key personnel in State Vocational

Rehabilitation and Employment Service agencies in the East met and extensively discussed problems of this nature. The sessions stressed the critical importance of medical and other information to the counselor in making a thorough appraisal of a client's physical and mental assets and liabilities. Deplored were narrow channels of procedure followed for consultation with physicians, the inadequacies of present medical report forms, and the shortcomings of our methods of translating medical data in terms of vocational capacity. It was said repeatedly that special appraisal technics should more generally include objective means of identifying directions of vocational interests and that measurements of temperamental proclivity should be developed. Points stressed were: we tend to be narrow regarding the kinds of jobs considered suitable for types of disabilities; present occupational exploration does not supply sufficient clues to suitable vocations; and job exploration needs to be systematic, broad, and comprehensive. More on-the-job training and other means should be taken to anticipate more critical demands of employment. Attention should be given employer attitudes, the areas of disability, and ways to improve our understanding.

Some of us may choose one of the following as all important in the problem: employer acceptance; economic conditions; clients' shortcomings; or better tools and facilities, more time, more money, and greater freedom of action. I think that over the long run the sheer *suitability* of our placements will be the determining factor in the success of our program. The slow, cumulative effect of consistently suitable placements will sell our program to the employers.

We can define "suitable work" as meeting the following requirements: 1) The job's physical demands must be reasonably consistent with the person's physical capacities. Work must not aggravate the disability, and the disability must not seriously reduce working efficiency. 2) The mental demands of the work should not be much higher or much lower than the level of the worker's intelligence and general educational development. Moreover, the work should let him exercise his special abilities and not require him to perform in areas for which he has little or no aptitude. 3) In addition to any "extrinsic" rewards such as money, security, or prestige, the job should engage his deeper and more abiding interests. 4) The work situation and activities should harmonize with the individual's temperamental proclivities, such as his desire to work independently or in close relation to others and his tolerance or intolerance for close supervision, for production under pressure, or for meeting high or rigid standards of quality.

I believe that, if a job seriously fails to meet these requirements, even though other surface advantages are offered, the worker is likely to lose over the long run in terms of job satisfaction, efficiency, and possibly health and general well-being.



## DIGESTS

One of the most dynamic and heartening developments in modern psychology is the technology of vocational appraisal and exploration that will allow for the establishing of suitability as the factor of overriding importance. Both workers and work are recognized as essentially psychological facts; jobs are forms or patterns of human behavior. The principal mission is to match the trait pattern of the individual with the trait requirement pattern of the occupation. The essential categories of behavior with which we work are those related to physical capacity, general mental ability and educational development, special aptitude, and interests and temperamental tendencies. For the large majority of clients we should give primary attention to identifying occupations that are really suitable, not merely current and convenient as in job openings listed at the local employment office.

During the early, exploratory stages of counseling, counselor and counselee should study those fields of work and their representative occupations that appear compatible with the counselee's interests, motivations, abilities, and capacities. When a good look is taken at the possibly two, three, or four generally related fields of work that seem most promising, keys will be found to perhaps hundreds of occupations in those fields, any of which might make a good employment objective. The clusters of occupations in a given field are likely to be rather closely related in general rewards and demands.

This "field of work" approach to vocational choice has not been backed up by well-organized and conveniently available occupational information resources. Occupational listings have been given in Part IV of the *Dictionary of Occupational Titles* under the fields of work recognized in the "Entry" occupational classification system. How-

ever, we have not had properly organized and specific information about the physical and other requirements of those occupations. Recently, the Labor Department's publication *Estimates of Worker Trait Requirements for 4,000 Jobs* provided us with such data. It rates the level of general educational development normally required for each of a series of specific aptitude factors; the particular directions of interest that are likely to be best satisfied by the job; the work situations that are normally the most important when judging a person's temperamental fitness for the job; and the more significant or critical requirements and working conditions.

A sequel to *Estimates* called the *Selective Placement Index*, developed under my supervision, is ready for publication and will be available to counselors and selective placement specialists in both our agencies. It organized the 4,000 jobs in the *Estimates* plus a thousand more to improve the coverage according to fields of work. For each occupation physical demand and educational and training demand ratings are given along with other information of value.

I firmly believe that such tools as these will enable the counselor, in nearly all situations, to do a reasonably thorough, systematic job of studying the forest before he concentrates on the individual trees and will be a means of finding at least most of the individual trees that, so to speak, he should study in detail before recommending employment to his client. I am optimistic that, when this approach to counseling is thoroughly understood, accepted, and implemented by such informational resources as I have mentioned, we shall be able to find better solutions to many of the perplexing problems of placement of the handicapped that we are facing today.

### The December Issue

In the December issue of *Rehabilitation Literature*, the Article of the Month will be "The Habilitation Role of the Special Educator," by Herbert Rusalem, Ed.D. In the Review of the Month, E. Todd Wheeler, Architect, will discuss the new book *Rehabilitation Center Planning, an Architectural Guide*, by F. Cuthbert and Christine F. Salmon, published by the Pennsylvania State University Press, University Park, Pa.

816

**Aphasia Rehabilitation Manual and Therapy Kit**

By: Martha L. Taylor and Morton M. Marks

1959. 23 p. cards. (2d ed.) Saxon Press, 207 E. 37th St., New York 16, N.Y. \$7.50.

COMPLETELY REVISED in format and content, this second edition of *Aphasia Rehabilitation Manual and Workbook*, published in 1955 by the Institute of Physical Medicine and Rehabilitation, New York City, is especially intended for use by persons untrained in speech therapy who are working with the aphasic patient. Successful therapy can be given by family members at home simply by following the directions given. Speech therapists will also find the manual and kit most helpful as they eliminate the necessity for therapists to create their own elementary picture-and-word vocabulary. One hundred functional nouns used in a patient's everyday vocabulary are printed on flash cards; other cards picture the nouns. The manual contains basic information on the nature of aphasia and the role of family and friends in the patient's rehabilitation, instructions for untrained therapists, directions for the 10 steps of aphasia therapy, checklist of dos and don'ts in the management of therapy sessions, and the basic list of 100 words. The new format allows for convenient storage of materials, which are boxed for placement on the bookshelf. Cards are sturdy and durable. Payment should accompany orders sent to the publisher.

817

**Cooperative Programs of Training and Research in Mental Retardation; A Survey Study of Cooperative Relationships Established Between Residential Facilities for the Mentally Retarded and Colleges and Universities**

By: Darrell A. Hindman, Ed. D.

1959. 160 p. tabs. Paperbound. Sponsored by American Association on Mental Deficiency Project on Technical Planning in Mental Retardation and available from Antioch Press, Yellow Springs, Ohio. Distribution is free but limited to libraries, students, and professional workers in the field of mental retardation. Enclose 25¢ to cover costs of postage and mailing.

THIS REPORTS a research study designed to explore factors that promote or hinder the development of cooperative programs between both state and private residen-

tial schools for the mentally retarded and colleges and universities. From answers to a questionnaire sent to 124 private and public residential institutions, Dr. Hindman has tabulated and analyzed data collected from the 15 state schools and hospitals and 3 private schools for the retarded chosen as representative. These 18 institutions were visited in order to obtain a more comprehensive understanding of the over-all philosophy and organization of the facilities. Part I describes organization of the study; Part II presents an analysis of questionnaires returned completed by 104 facilities. Part III summarizes findings on the 18 representative facilities visited; Part IV discusses factors impeding or facilitating the establishment of good cooperative working relationships between institution and university personnel. Conclusions reflecting responses of participants in the study are summarized. Also includes a bibliography, the questionnaire form, and a listing of superintendents and directors of residential facilities co-operating in the project.

818

**Philanthropy in England, 1480-1660; A Study of the Changing Pattern of English Social Aspirations**

By: W. K. Jordan

1959. 410 p. tabs., graphs. Russell Sage Foundation, 505 Park Ave., New York 22, N.Y. \$6.00. Published originally in England by George Allen & Unwin, Ltd.

THE DEVELOPMENT of moral and social responsibility in England over a period of 180 years, as reflected in many thousands of wills proved in 10 English counties during the period, is traced in this study, the first of a series by Dr. Jordan, Professor of History at Harvard University and President of Radcliffe College. Described by the London *Sunday Times* as a "new classic of social and cultural history," it mirrors the pattern of society's attitudes toward problems of poverty, misery, and ignorance. Various measures taken during the reign of the Tudors and Stuarts to meet the needs of the poor are discussed; institutions of social change and reformation came into being, largely through the benefactions of an urban aristocracy. The forces influencing the growth of private philanthropy and its achievements during the period covered are analyzed. Dr. Jordan plans to discuss, in more detail, in the second volume the philanthropic impulse in London urban society. The third volume will

## BOOK REVIEWS

consider changing social structure and aspirations in rural England. Additional studies of rural counties and Bristol may be published separately in appropriate periodicals. Dr. Jordan has succeeded in writing a fascinating account of a cultural revolution the influence of which persists in modern times.

819

### **Psychopharmacology; Problems in Evaluation**

Edited by: Jonathan O. Cole and Ralph W. Gerard

1959. 662 p. figs., tabs. (*Publ. no. 583*) National Academy of Sciences-National Research Council, 2101 Constitution Ave., Washington 25, D.C. \$6.50.

THIS BOOK CONTAINS the proceedings of the Conference on the Evaluation of Pharmacotherapy in Mental Illness, sponsored by the National Institute of Mental Health, the National Academy of Sciences-National Research Council, and the American Psychiatric Association, in Washington, D.C., in September, 1956. Included are general review papers and papers by the Committees on Preliminary Screening of Drugs, Test Conditions, and Evaluation. Discussions centered around problems in the discovery of new compounds and screening problems in the valid evaluation of their therapeutic effectiveness and toxicity, as well as the various aspects of experimental design in research. The book should be useful as a source of reference to those conducting research in the field of psychopharmacology.

820

### **Report of Medical Studies on Deaf-Blind Persons**

By: Industrial Home for the Blind

1959. 62 p. illus., figs., tabs. (*Rehabilitation of deaf-blind persons, Vol. III*) Industrial Home for the Blind, 57 Willoughby St., Brooklyn 1, N.Y. \$1.00.

THIS SMALL BOOK, one of a series resulting from a joint study project of services for the deaf-blind, contains a series of papers concerned with the identification of medical needs of deaf-blind persons and the procedures used in working with this group. Generally speaking, the procedures recommended are those used for the blind population. The great value of a medical service as an integral part of agency activity is stressed throughout.

Contents: The social casework role in the medical rehabilitative process, Alfred J. Cross.—Health in general, Louis Kolbrenner.—Otological investigations, Edmund Prince Fowler, Sr.—Ophthalmological study of deaf-blind persons at the IHB, Regina V. Gilroy.—Speech and hearing services for deaf-blind persons, Moe Bergman.—Vision rehabilitation for deaf-blind persons, Gerard J. De Angelis.

821

### **The Surgeon and the Child**

By: Willis J. Potts, M.D.

1959. 225 p. illus. W. B. Saunders Co., W. Washington Sq., Philadelphia 5, Pa. \$7.50.

IN THE PAST two decades pediatric surgery has gained tremendous importance and broadened in scope. Dr. Potts, Surgeon-in-Chief of Children's Memorial Hospital, Chicago, and Professor of Pediatric Surgery at Northwestern University, has written what he terms "the story of children's surgery." Not a standard text, the book reflects Dr. Pott's personal experience with some of the surgical problems common to children and infants. Certain points in diagnosis and specific methods of treatment are emphasized. Chapters are included on preoperative care, anesthesia, the management of cardiac arrest, and post-operative care, in addition to those on specific conditions requiring surgery. In the introductory chapters, psychological aspects of surgery, hospitalization, and congenital deformity are discussed briefly. The surgeon's relationship to the child and the parents is defined, as well.

822

### **Survey of Employers' Practices and Policies in the Hiring of Physically Impaired Workers**

By: Federation Employment and Guidance Service

1959. 131 p. tabs., forms. Paperbound. Federation Employment and Guidance Service, 42 E. 41st St., New York 17, N.Y.

A THREE-YEAR SURVEY of policies and practices of New York City employers in regard to hiring the physically handicapped was conducted by Federation Employment and Guidance Service, an affiliate of the Federation of Jewish Philanthropies of New York City. Material in the report is based on interviews held with personnel directors or other personnel of firms representative of those furnishing more than 50 percent of the employment in the city. Disabilities covered are epilepsy, cerebral palsy, and cardiac, orthopedic, and serious vision problems. A list of 36 major findings of the survey is given in the summary chapter. Part I of the report discusses characteristics of the industries studied, their hiring practices and experiences with the disabled worker, and types of occupations held by the disabled. Part II analyzes selected characteristics of specific firms, rather than those general to a particular industry, that appear to be relevant to the hiring of the handicapped. Chapters are included on the role of the industrial physician and his participation in determining hiring policies; changes in hiring practices during the 1950's; and reasons for and against hiring the handicapped.

(See also #873 this issue of *Rehab. Lit.*)



## Abstracts of Current Literature

*This abstracting section, together with other numbered references indexed in this issue, serves as a supplement to the reference book Rehabilitation Literature 1950-1955, compiled by Graham and Mullen and published in 1956 by the Blakiston Division of McGraw-Hill Book Company, New York. An author index will be found on the last page of the issue.*

### AMPUTATION—EQUIPMENT—JAPAN

823. Hiyeda, Masatora (*Natl. Rehab. Center for the Handicapped, Tokyo, Japan*)

Prosthetic services in Japan. *Prostheses, Braces, and Technical Aids*. Summer, 1959. 5:1-6.

In Japan the majority of amputees are registered as disabled; between 80 and 90 percent of them receive benefits provided by law. Dr. Hiyeda, Vice Director of the National Rehabilitation Center, describes types of prostheses available in Japan. Special problems of amputees engaged in farming have been met by adaptations in prostheses.

### AMPUTATION—EQUIPMENT—RESEARCH

824. U. S. Naval Hospital. Amputation Center, Oakland (Calif.)

*Construction, fitting, and alignment manual for the U. S. Navy soft closed end plastic below-knee socket; (report of) Navy Prosthetic Research Laboratory . . . Oakland, Calif., The Center, 1959. 52 p. illus., diagrams. (July 1, 1959)*

A manual useful for the prosthetist, it describes in detail all steps in the fabrication and fitting of a below-knee artificial leg, from the initial measurement and tracings through construction, final fitting, and alignment. The list of various materials and equipment required in construction of the U. S. Navy soft socket prosthesis is intended for reference use only; sources listed are those most accessible to the Oakland U. S. Naval Hospital. The soft-socket prosthesis has been used routinely by the Navy Amputee Center for the past 12 years. Because it is constructed of plastic, it may be worn in the shower and in swimming. The manual is extensively illustrated.

Available from Captain Thomas J. Canty, MC, USN, Chief, Amputee Service, U. S. Naval Hospital, Oakland 14, Calif.

### AMPUTATION—MENTAL HYGIENE

See p. 322.

### APHASIA

825. Tobis, Jerome S. (*1 E. 105th St., New York 29, N.Y.*)

Physical medicine and rehabilitation management in aphasia. *J. Am. Med. Assn.* Sept. 26, 1959. 171:4:393-396.

The relationship of speech to motor activity was studied in 58 hemiplegic patients with aphasia; a comparable group of 51 hemiplegics without aphasia was observed. Impairment of speech was found to be correlated with loss of motor power in the hand. Another interesting

finding was the fact that many aphasic patients, when allowed to stand and walk, improved in their ability to communicate. Therapeutic activity other than speech therapy may provide language experience. Joint sessions of speech and occupational therapies provide motor activity that enhances speech therapy. Inadequate management of such patients results from dealing with aphasia purely as a psychological or linguistic disorder.

See also 816.

### APHASIA—DIAGNOSIS

826. Rapin, Isabelle (*Div. of Neurology, Albert Einstein Coll. of Med., New York 61, N.Y.*)

The neurologist looks at the non-verbal child. *Exceptional Children*. Sept., 1959. 26:1:48-52.

The team approach to treatment of the nonverbal child is the most efficient in arriving at a diagnosis; an audiologist, speech pathologist, psychologist, child psychiatrist and neurologist are required. It is the neurologist's responsibility to decide whether there is evidence of an organic condition of the brain that could explain the child's difficulty, the possible nature of such a lesion, the areas of the brain involved, and whether the lesion is fixed or the disease progressive. Following the taking of a detailed family history, the neurologist makes a thorough examination of the child, employing ancillary laboratory tests. After an evaluation of the findings, he calls on the other members of the team for further evaluation of the problem.

### BRAIN

827. Holtzman, Milton (*V. A. Hosp., Bronx 68, N.Y.*)

Anatomical localization of common vascular brain syndromes, by Milton Holtzman, Nicholas Panin, and Alfred Ebel. *Am. J. Phys. Med.* Aug., 1959. 38:4:133-135.

Presents a simple, schematic representation of the vascular supply of the brain and the brain stem, as well as the location of the cranial nuclei, to aid the clinician in diagnosis of occlusive vascular lesions of the brain. Only the commonly encountered symptom-complexes are shown.

### BRAIN INJURIES—PSYCHOLOGICAL TESTS

828. Arthur, Bettie (*Children's Psychiatric Hosp., Univ. of Michigan, Ann Arbor, Mich.*)

Comparison of the psychological test performance of brain damaged and normal children in the mental age range from five to six. *Dissertation Abstracts*. 1958. 19:1441-1442.

The difficulty of obtaining a differential diagnosis of brain damage in young children led the author to a

## ABSTRACTS

study of exogenous children with a mental age range of 5-0 to 6-0, as measured by the Revised Stanford-Binet Intelligence Scale, Form L. An attempt was made to determine whether the same deficits that occur in older brain-damaged persons can be detected in younger subjects. Methods of testing are described; the battery consisted of intelligence, perception, and motor tests, administered individually. Results indicated that there is a separation of intelligence and perception at an early mental age level and that perceptual skills have differentiated into specific skills by the time both normal and brain-damaged children have reached the 5-0 to 6-0 age level. Findings suggest it is possible to diagnose brain damage on the basis of the internal patterning of successes and failures on general intelligence tests. It is believed that a combination of intelligence and perceptual tests is better for this purpose than perceptual tests alone.

### CEREBRAL PALSY—OHIO

829. Riepenhoff, John P. (3000 Sullivant Ave., Columbus 4, Ohio)

Planning community programs for cerebral palsy patients, by John P. Riepenhoff, Ernest W. Johnson, and Paul R. Miller. *Ohio State Med. J.* May, 1959. 55:5:653-656.

The neurologic evaluation service described here is the outgrowth of a study by a joint committee of the Columbus (Ohio) Academy of Medicine and the Metropolitan Health Council. (See *Rehab. Lit.*, Oct. 1957, #1163.) The study revealed a complex and confusing situation existing in Columbus and Franklin County, where some 17 organizations were contributing to care of the cerebral palsied. For the most part, all were giving acceptable service within the limits of personnel and facilities and there was less duplication than might have been expected. Two major deficiencies were the inadequacy of medical diagnosis and supervision and the lack of complete records and follow-up. It was decided to organize a central evaluation service consisting of various medical and allied specialists and to provide for a coordinating committee to act as a community planning and integrating agency for cerebral palsy services. The evaluation center was located at Children's Hospital. Services of the center and the organization and responsibilities of the coordinating committee are described.

### CEREBRAL PALSY—MEDICAL TREATMENT

830. Poser, Charles M. (Univ. of Kansas Med. Center, 39th and Rainbow St., Kansas City 12, Kan.)

Cerebral palsy; the need for reevaluation of obsolete concepts. *J. Kan. Med. Soc.* Mar., 1959. 60:3:131-134.

Conflicting concepts concerning cerebral palsy and its causes, the limited usefulness of descriptive classification schemes in prescribing therapy and in counseling parents, and the difficulty of predicting the cerebral palsied child's potential complicate the work of the special pediatric clinic. In the primary problem of arriving at a correct diagnosis, the team approach by a number of specialists is indispensable. Dr. Poser discusses the possible agents responsible for crippling disease in children as seen in the special pediatric clinic and the problems encountered by the physician in differential diagnosis. Proper selection of patients for optimum therapeutic effort is extremely

difficult and should be made solely on the basis of medical considerations—the diagnosis and the child's potential, especially in terms of mental endowment. Realistic goals of therapy and rehabilitation should be set, since not all children seen in the special pediatric clinic can benefit from therapy or training.

### CEREBRAL PALSY—MENTAL HYGIENE

See 814.

### CEREBRAL PALSY—SPECIAL EDUCATION

See 832.

### CEREBRAL PALSY— STUDY UNITS AND COURSES

831. Allen, Robert M., ed. (1411 Northwest 14th Ave., Miami, Fla.)

*Proceedings of the Postdoctoral Workshop in Psychological Services for the Cerebral Palsied* (June 22-26, 1959, University of Miami—United Cerebral Palsy Rehabilitation Center); edited by Robert M. Allen (and others). Coral Gables, Fla., Univ. of Miami Pr., 1959. 48 p.

Summaries of the papers, discussions, and practice of Workshop sessions are presented in this booklet published cooperatively by the University of Miami, the Rehabilitation Center, and the Office of Vocational Rehabilitation.

Contents: Neurophysiological basis of cerebral palsy, Chester A. Swinyard.—Neurosurgical treatment of cerebral palsy, Irwin Perlmutter.—Medical evaluation and diagnostic assessment of the cerebral palsied, Howard A. Engle.—Orthopedic evaluation, Duke B. Baird.—History, theory, and present status of rehabilitation, James F. Garrett.—Evaluation of the vocational potential of the cerebral palsied by the work sample technique, Josephine Arns.—Psychological assessment procedures for the cerebral palsied, Robert M. Allen.—Demonstration of assessment procedures and modifications, Christopher C. Corrie.—Interdisciplinary procedures in rehabilitation, Darrell J. Mase.—Vocational counseling with the cerebral palsied, R. J. Banks.—Panel discussion: Rehabilitation with the cerebral palsied.—Psychological information used to predict vocational achievement, Christopher C. Corrie.—Perceptual problems in cerebral palsy and their implications in habilitation, Harold Michal-Smith.—The theoretical basis of special education, Godfrey D. Stevens.—Personality assessment, counseling and psychotherapy with the cerebral palsied, Thomas W. Jefferson.

Drs. Corrie, Jefferson, Michal-Smith, and Jack Sandler were coeditors with Dr. Allen in summarizing the content of the Workshop.

### CHILDREN—GROWTH AND DEVELOPMENT

832. Gibbs, Norah (Child Guidance Training Centre, London, England)

Deprivation of experience; does it matter? *Spastics' Quart.* Sept., 1959. 8:3:12-20.

In same issue: The functions of the nursery in a school for cerebral palsied children, M. J. Ram. p. 21-28.

Much remains to be learned concerning the developmental patterns and problems of cerebral palsied children



and those with other handicaps. Avenues of research suggested are the developmental patterns of "normal" children, the adjustments made by children with other handicaps, and long-term studies of cerebral palsied children within the environment in which they have lived. Miss Gibbs discusses the relevancy of Piaget's developmental theories to understanding of the cerebral palsied, ways in which blind children react to their handicap, and how environment can be enriched to afford the cerebral palsied an opportunity to develop along more normal lines.

Miss Ram (*Claremont School, Bristol, England*) describes the organization of a nursery school unit in a school for cerebral palsied children. Preschool children can benefit from the companionship of children with like handicaps, from the emotional release from tension in the home, and from the training they receive. The school also affords an observation period during which children can be evaluated in regard to their possible educability.

See also 814.

# CHRONIC DISEASE

833. American Public Health Association (1790 Broadway, New York 19, N. Y.)

Prevention and control of chronic disease (a symposium). *Am. J. Public Health*. Sept., 1959. 49:9:1120-1156.

Contents: 1. Cardiovascular disease, with particular attention to atherosclerosis, Robert E. Olson.—2. Mental disorders, Benjamin Pasamanick.—3. Cancer, Abraham M. Lilienfeld.—4. Radiation hazards, John C. S. Paterson.—5. Periodic health examinations and multiple screening, Lester Breslow.

Major issues in the prevention and control of non-communicable diseases and the possible ways of meeting them through public health measures were discussed by participants in a symposium held at the annual meeting of the American Public Health Association in 1958.

# CONGENITAL DEFECT—ETIOLOGY

See 855.

# DEAF

834. De Schweinitz, Louise (*Dr. C. Arden Miller, Univ. of Kansas Med. Center, Kansas City 12, Kan.*)

Delays in the diagnosis of deafness among preschool children, by Louise de Schweinitz, C. Arden Miller, and June B. Miller. *Pediatrics*. Sept., 1959. 24:3:462-468.

Parents of children enrolled in the Preschool for the Deaf, a facility of the Children's Rehabilitation Unit of the University of Kansas Medical Center, and those attending the Parents Institute at the Kansas State School for the Deaf were interviewed to obtain a complete medical history of the 48 children. Data from the interviews revealed that parents usually suspected deafness before the physician caring for the child openly considered the possibility. Delayed speech rather than hearing disorder was the presenting complaint of parents. Delayed diagnosis after the first consultation with a physician was reported for nearly half the children. Hearing loss can usually be determined by simple testing procedures before the child's first birthday. Early diagnosis is essential in plan-

ning for the care and training of the child and for family adjustment to the child's handicap.

# DEAF—SPECIAL EDUCATION

835. Connor, Leo E. (*Lexington School for the Deaf, 904 Lexington Ave., New York 21, N. Y.*)

Diagnostic teaching; the teacher's new role. *Volta Rev.* Sept., 1959. 61:7:311-315.

Trained observation of the deaf child at work in the classroom can provide teachers with valuable information about the child's learning habits and study skills, interests, initiative, and motivation. Constant analysis of written and oral work and the keeping of written records on the child's development provide information for objective evaluation of progress. Techniques the teacher would find useful in planning for the needs of individual deaf children in the schoolroom are discussed. Cooperation and planning with other personnel on the school staff should result in better diagnosis of the child's problems.

# DEAF-BLIND—MEDICAL TREATMENT

See 820.

# DRUG THERAPY

See 819.

# EMPLOYMENT (INDUSTRIAL)—PLACEMENT

836. Employment Sec. Rev. Sept., 1959. 26:9.

Title of issue: Local office action for the handicapped.

Contents: Mixing the magic ingredients, Donald W. Bottom and Dwight S. Waring, Jr.—Sooners "team up" for the handicapped, Lyman Stanley.—On-the-job training program for the handicapped, Bernard Kau.—Memphis meeting helps to educate employers, Herrington L. Ragsdale.—New tool for analyzing physical demands of jobs, Emanuel Weinstein.—Cooperation, coordination, communication, Francis Bawden.—No stairs for the handicapped; enter with dignity, Mary Archerd.—The mentally handicapped can be placed, H. T. McNamee.—Employment of the emotionally handicapped, Isadore Morantz.—University program trains workers who place the blind, William S. Wood.—Chance Vought hires workers with "physical limitations," George E. Wysong.—New TB interviewing guide, Harry R. Mitchell.—Community groups spearhead Miami "Hire the Handicapped" program, Robert Heller, Marvin Hoss, and Virginia Gartrell.—Area EPH committee expands operations, Agnes Quirk.—Rhode Island revises its reference aid on mental retardation, George J. Soares and Harry F. Griffin.—Employment security through "Goodwill," John Ledbetter.

837. San Francisco State College

*Proceedings, Institute on Placement, February 1-4, 1959, held by . . . in cooperation with the Office of Vocational Rehabilitation, State vocational rehabilitation agencies, and State employment service agencies.* San Francisco, The College, 1959. 72 p. forms. Mimeo.

The Institute was planned to stimulate more extensive joint planning and cooperation between vocational rehabilitation and employment service agencies in local programs, to increase and improve employment opportunities for handicapped workers, and to aid in staff training

## ABSTRACTS

in placement technics. Surveys of ready-for-employment cases in Arizona, California, Oregon, and Washington were made in advance of the Institute; this material was reviewed and used as the basis of discussions of the more difficult placement problems of vocational rehabilitation agencies.

Contents: Introductory talk, Philip Schafer.—The placement problem, Clyde Gleason. (Digested in this issue of *Rehab. Lit.* See #815.)—Report of cases reviewed in Oregon and Washington, James Burrell.—Report of cases reviewed in Arizona and California, Clyde Gleason.—Employer attitudes and needs, Robert T. Giles, Jr.—Union attitudes and needs, Arthur Hellender.—Job analysis, William Appleby.—Meeting employer objections, Irene Zable.—Organization and function of an employer committee, Lawrence N. Loban.

Discussion groups covered basic employability, employment objectives, programs of training, employer contacts, interagency communication, and agency responsibility.

Available from Dr. William Usdane, Coordinator, Special Education and Rehabilitation Counseling, San Francisco State College, 1600 Holloway, San Francisco, Calif.

See also 815; 822.

## EXERCISE

838. Clarke, David H. (*Dept. of Physical Education, Univ. of California, Berkeley, Calif.*)

Progressive resistance exercise in corrective therapy. *J. Phys. and Mental Rehab.* July-Aug., 1959. 13:4:118-121.

A discussion of the development of concepts pertaining to progressive resistance exercise in corrective therapy, the physiological rationale, and research on its value as a technic for increasing muscular strength. Investigations of the effects of static and dynamic exercise and the technics for objective determination of resistance load, as reported in the literature, are discussed. 18 references.

## HANDICAPPED—EQUIPMENT

See p. 330.

## HEART DISEASE

See 821; 833.

## HEMIPLEGIA

See 825.

## HEMIPLEGIA—DIAGNOSIS

839. Michels, Eugene (*5210 Jackson St., Philadelphia, Pa.*)

Evaluation of motor function in hemiplegia. *Phys. Therapy Rev.* Sept., 1959. 39:9:589-595.

Describes a test developed by Mr. Michels and his co-workers at Magee Memorial Hospital for Convalescents, Philadelphia, for the evaluation of motor function in hemiplegic patients. Evaluation is made on the patient's ability to perform basic, combined motions of the parts concerned, in positions where those motions or functions are most vital. Technics of the manual muscle test are not used. At no time does the examiner touch the patient, thus ruling out any undeterminable stimulation that could

produce inconsistency in motor function. The test form, included in the article, facilitates the designation of progress or lack of progress and provides information on which the treatment program can be based. The test items selected are discussed for clarification.

## MENTAL DEFECTIVES

840. Beier, Delton C. (*Psychological Clinic, Univ. of Indiana, Bloomington, Ind.*)

Factors in the management of mental retardation. *Internatl. Rec. of Med.* Mar., 1959. 172:3:155-161.

A summary of the major factors involved in planning for management of the mentally retarded. Because the physician is most apt to be the first professional person consulted by the family suspecting mental retardation in the child, he should be aware of areas to be studied in arriving at a diagnosis and the considerations in realistic planning for effective management. Special difficulties in differential diagnosis are mentioned to caution the physician against hasty decisions in such cases. Primary purpose of the article was to point out critical aspects in mental retardation management in the social context.

## MENTAL DEFECTIVES—NEW JERSEY

841. Bice, Harry V. (*211 E. State St., Trenton, N. J.*)

Services for retarded children. *Public Health News*, N.J. State Dept. of Health. Sept., 1959. 40:9:307-314.

Mechanization occurring in both urban and rural employment has decreased employment opportunities for the mentally retarded. However, increased emphasis on rehabilitation has resulted in belief that the trainable and educable retarded could take their place in society if provided the necessary services. Dr. Bice describes services currently in New Jersey, as well as plans for expanded facilities to meet the needs of mentally retarded children and their parents.

## MENTAL DEFECTIVES—EMPLOYMENT

See 863; 864; 873.

## MENTAL DEFECTIVES—INSTITUTIONS

842. Tarjan, George (*Pacific State Hospital, Box 100, Pomona, Calif.*)

The natural history of mental deficiency in a state hospital: II. Mentally deficient children admitted to a state hospital prior to their sixth birthday, by George Tarjan (and others). *A.M.A. J. Diseases of Children*. Sept., 1959. 98:3:370-378.

One of a series of studies being conducted at Pacific State Hospital, Pomona, Calif., on the population movement of mental defectives in a state institution and the related physical, behavioral, social, and cultural factors involved. Subjects of the study were 709 patients admitted between 1948 and 1952. Children admitted prior to their sixth birthday (170) were compared with those admitted at an older age (539). During the four-year period of follow-up, it was found that younger patients were more severely deficient and had more superimposed handicaps than those admitted at an older age. Mortality among younger patients was higher during their first year of hospitalization and probability of discharge during the

first four years' hospitalization was slight. Families of these children were representative of a cross section of the adult general population. Physicians counseling parents of the mentally deficient and hospital administrators planning programs should find the article useful in their work.

# MENTAL DEFECTIVES—PSYCHOLOGICAL TESTS

843. Johnson, G. Orville (805 S. Crouse Ave., Syracuse 10, N. Y.)

Physical condition and its effect upon learning in trainable mentally deficient children, by G. Orville Johnson and Rudolph J. Capobianco. *Exceptional Children*. Sept., 1959. 26:1:3-5, 11.

A report of a study designed to measure the growth of trainable mentally deficient children in a number of areas over a two-year period; children from 7 public schools and 10 institution classes were included. Composite reports of ophthalmological, otological, and pediatric examinations were used in assigning children to three groups according to physical condition. Over a 20-month period improvement or regression in 27 children chosen for the study was evaluated; no significant differences were found among the groups rated as good, fair, or poor. Their general physical condition did not appear to affect the benefit they derived from class training. Results verify those of earlier studies. Extensive physical examinations beyond those normally required of children attending school do not appear to be warranted for the trainable mentally deficient in terms of learning and training objectives of the class. The study is part of a larger research project on severely retarded children, conducted under the auspices of the New York State Mental Health Commission and the New York State Interdepartmental Health Resources Board.

# MENTAL DEFECTIVES—RESEARCH

844. Blackman, Leonard S. (Edward R. Johnstone Training and Research Center, Bordentown, N.J.)

Research in mental retardation; a point of view. *Exceptional Children*. Sept., 1959. 26:1:12-14.

Formerly special classes for the mentally retarded were justified on the basis of a "relief" philosophy—relief for normal children in regular classes and for the teacher who experienced discouraging teaching and behavioral problems. Curriculum and methods, rather than being geared to give only low-level skills to the retarded, should seek to expand the intellectual capacity of this group. The belief that mental retardation is inevitably incurable inhibits research. A certain false security is achieved through labeling children in diagnostic categories and in believing that damage inherent in the child, rather than the educational methods employed, is responsible for the child's lack of improvement and growth. In the future research should approach the problem through systematic application of the principles of learning, perception, and personality theories. Scientific evaluation of the effectiveness of teaching methods evolved through this type of approach offers more chance for success in educating the mentally retarded. The article is one of a series of informal research essays planned by the Council for Exceptional Children's Research Committee.

# MENTAL DEFECTIVES—SPECIAL EDUCATION

845. Eichorn, John R. (Assoc. Prof. of Special Education, Indiana Univ., Bloomington, Ind.)

Special classes—no panacea. *Elementary School J.* Oct., 1959. 60:1:37-39.

Although the growing number of special classes for mentally retarded children is a sign of increased concern of the public schools for those unable to profit from attendance in the regular classroom, the special class is doomed to failure unless school officials choose carefully the pupils who can benefit from it. Such children should be identified early and their teachers should be competent as well as especially trained for such work. Only if the program is well understood and accepted in the school and community can it fulfill its purpose.

# MENTAL DEFECTIVES—STUDY UNITS AND COURSES

See 817.

# MENTAL DISEASE

See 819; 857.

# MENTAL DISEASE—MEDICAL TREATMENT

See 819; 833.

# NATIONAL HEALTH SURVEY—1956-

846. U. S. Public Health Service

*Health statistics from the U. S. National Health Survey; limitation of activity and mobility due to chronic conditions, United States, July, 1957-June, 1958.* Washington, D. C., Govt. Print. Off., 1959. 40 p. figs., tabs. (Public Health Serv. publ. no. 584-B11)

Statistical estimates on the prevalence of limitation of activity and mobility among persons with one or more chronic conditions are given according to age, sex, residence, family income, and major activity. Estimates were derived from household interviews conducted by the U. S. Bureau of the Census with a representative sample of the population during the one-year period. Findings revealed that an estimated 17 million persons, representing 10 percent of the total population of the United States, are limited in ability to work, keep house, or engage in outside activities. Between 4 and 5 million persons are estimated to have difficulty moving about or cannot move without help. Of this group, approximately one million are completely homebound. Activity limitations were most frequently reported among low-income families and older people. A description of the survey design, methods, and reliability of the data is contained in the first appendix. Additional information in the second and third appendixes includes definition of terms relating to chronic conditions and disability and terms used in the study, as well as the questionnaire form used in interviewing.

Available from U. S. Superintendent of Documents, Washington 25, D. C., at 30¢ a copy.

# NERVE INJURIES—MEDICAL TREATMENT

847. Boyle, Robert W. (516 N. 15th St., Milwaukee 3, Wis.)

The physical treatment of peripheral nerve injuries.



## ABSTRACTS

*Minn. Med.* Apr., 1959. 42:4:417-423.

In the treatment of peripheral nerve injuries, diagnosis of the type and severity of injury must first be determined. Electrodiagnostic testing and electromyography are useful in differentiating degenerating, degenerated, and regenerating nerves. Dr. Boyle explains the method and physiology of the use of electrical tests, as well as the rationale for certain types of physical treatment in peripheral nerve injuries. Variations in the treatment of three common types of lesions—facial nerve paralysis and injury to the radial nerve and to the deep peroneal nerve—are discussed. The author points out that, where there is degeneration with its resultant muscle atrophy, the chances for complete neurotization and function of the muscle are exceedingly poor, regardless of the type of injury. The discussion does not cover injuries requiring immediate surgical intervention but is concerned with treatment after initial care has been accomplished.

## NEUROLOGY

848. Roth, Grace M. (*Section of Physiology, Mayo Clinic, Rochester, Minn.*)

Sweat patterns and skin temperatures in patients with brain and spinal cord lesions, by Grace M. Roth (and others). *J. Am. Med. Assn.* Sept. 26, 1959. 171:4:381-385.

Previous investigators have reported that hyperactivity of the sympathetic nervous system after anterior poliomyelitis may cause abnormal vasoconstriction in the feet and legs that results in coldness, cyanosis, sweating, and pain when the patient is in a cold environment. The present study of 30 patients with various lesions of the brain and spinal cord established that complete sweating occurred in those with residual poliomyelitis and brain injuries. Nearly complete sweating occurred in some with injuries below the level of the third thoracic segment of the spinal cord. In a group with spinal cord injuries below the level of the eighth cervical segment, partial lack of sweating coincided partly with the level of injury and surgical procedures. Those with injury above the eighth cervical segment of the cord had complete lack of sweating. In some patients with spinal cord injuries vasoconstrictor fibers, but not the sweating fibers, were damaged. The finding appears to indicate a variation in distribution of these fibers in the spinal cord.

See also 827.

## OCCUPATIONAL THERAPY

849. Shontz, Franklin C. (*Highland View Hosp., Harvard Rd., Cleveland 22, Ohio*)

Evaluation of the psychological effects of occupational therapy; a demonstration project. *Am. J. Phys. Med.* Aug., 1959. 38:4:138-142.

Describes a research project undertaken at Highland View Hospital, Cleveland, to demonstrate the practicality of controlled research in the evaluation of psychological benefits of occupational therapy. Methods of "addition" and "subtraction," techniques used in the field of perceptual experimentation in psychology, are discussed as approaches to evaluation of program effectiveness. In subtractive investigations, data will reveal what the therapeutic agent is contributing to over-all patient care in the context of a functioning total program. From results of the experi-

ment the author concludes that psychological changes of the type expected from occupational therapy are measurable. He believes that a series of small-scale "subtraction type" studies conducted over an extended period of time would be an effective technic for program evaluation.

## OLD AGE—SPEECH CORRECTION

850. Mitchell, Joyce (*Geriatric Unit, Oxford United Hospitals, Oxford, England*)

Speech and language impairment in the older patient; some problems in management. *Geriatrics.* July, 1958. 13:7:467-476.

Experience with 55 patients with speech and language impairment during a four-year period in a geriatric unit provided the findings discussed. Speech and language symptoms were generally associated with presenile or senile atherosclerosis, degrees of dementia, mood changes difficult to define because of the brain damage, mild confusion, or mild mental impairment. Other factors affecting rehabilitation of such patients, the role of the speech therapist, and the management of therapy are considered in the light of the author's experience. Counseling with members of the patient's family or with those responsible for his care is another duty of the therapist.

## PARAPLEGIA

851. Guttmann, L. (*Natl. Spinal Injuries Centre, Stoke Mandeville Hosp., Aylesbury, Bucks, England*)

The place of our spinal paraplegic fellowman in society. *Rehabilitation.* July-Sept., 1959. 30:15-27.

The Dame Georgiana Buller Memorial Lecture, 1959, given at the annual general meeting of the British Council for Rehabilitation.

Dr. Guttmann, Director of the National Spinal Injuries Centre, describes the advances in care of patients with spinal paraplegia and the facilities available in Great Britain for treatment. Conclusions drawn from a statistical analysis of 2,000 cases of paraplegia treated at Stoke Mandeville over the past 15 years are discussed. Various services provided for the social, vocational, and physical rehabilitation of these patients are described. The ability of paraplegics to engage in sports was recognized and led to the organization of the Stoke Mandeville Games, an event held annually. International competition will be held every four years in the country where the Olympic Games are scheduled. The article includes illustrations.

See also 848; 869; 870.

## PARENT EDUCATION

852. Rideout, George M.

*Building an estate for a crippled child*, by George M. Rideout and John D. Riordan. Chicago, Natl. Soc. for Crippled Children and Adults, c1959. 22 p. (*Parents' ser. no. 5*)

In their approach to a subject that could easily prove dull and overtechnical to the average layman, the authors of the latest addition to the Society's Parents' series have succeeded in adding the human touch. They have thought of all contingencies in the family situation—size of family income, the welfare of both the disabled child and his

nondisabled brothers and sisters, the wife's need should the father be disabled or die, the disposing of an estate through a properly drawn will, and the types of investment suited to income. The advice is of very practical value even for the family whose children are sound and healthy; how much more so, then, for those who must provide for a disabled child who may not be self-supporting as an adult.

Available from the National Society for Crippled Children and Adults, 2023 W. Ogden Ave., Chicago 12, Ill., at 25¢ a copy.

# PARTIALLY SIGHTED—NURSING CARE

853. Gibbons, Helen (*Natl. Soc. for the Prevention of Blindness, 1790 Broadway, New York 19, N. Y.*)

Finding and helping the partially seeing child, by Helen Gibbons and Florence Cunningham. *Nursing Outlook*. Sept., 1959. 7:9:524-526.

An explanation of the school nurse's role in the prevention of blindness and the correction of visual loss in children. A close relationship is needed among nurse, teacher, and ophthalmologist to insure complete understanding of the child's condition and the medical and educational treatment he will need. The nurse should be aware of resources available in the school and community for helping the child. Counseling with parents is an important aspect of the nurse's job.

# PHILANTHROPY—GREAT BRITAIN

See 818.

# POLIOMYELITIS—MEDICAL TREATMENT

854. Chapman, Eugene H. (*Suite 1, 1275 N. University, Provo, Utah*)

Transfer of the long toe extensors for imbalance of the foot following poliomyelitis. *J. Bone and Joint Surg.* Sept., 1959. 41-A:6:1077-1093.

Although transfer of the long toe extensors in one form or another has been used and described, the use of toe-extensor transfers to gain active dorsiflexion of the foot has not gained the wide acceptance it deserves, Dr. Chapman believes. Indications for toe-extensor transfers, extensive data on follow-up findings in 44 patients who had transfers for paralysis following poliomyelitis, age limits for surgery, and surgical technics are discussed. The procedure described is similar to one used extensively by Dr. P. A. Pemberton at the Shriners' Hospital, Salt Lake City, who reports that it is a standard procedure of orthopedic surgeons in Oklahoma City.

See also 848.

# PREMATURE BIRTH

855. Knobloch, Hilda (*561 S. 17th St., Columbus 5, Ohio*)

The effect of prematurity on health and growth, by Hilda Knobloch (and others). *Am. J. Public Health*. Sept., 1959. 49:9:1164-1173.

Incidence of illness, physical defect, and subsequent growth patterns in relation to weight at birth were studied in a group of 500 premature and 492 full-term infants, comparable in respect to various socioeconomic variables.

Data revealed that at 40 weeks of age premature infants are, in general, lighter and shorter than mature infants and have more physical defects and a higher incidence of illness. Findings appear to indicate a relationship among neurologic status, physical growth, physical defect, and illness and that factors responsible for prematurity, and which cause cerebral damage, have a generalized deleterious effect. Socioeconomic factors that have a role in the production of prematurity, the complications of pregnancy, and the development of neuropsychiatric disability apparently operate in relationship to physical disabilities as well.

# PSYCHOLOGICAL TESTS

856. Braen, Bernard B. (*600 S. State St., Syracuse 2, N. Y.*)

Intelligence tests used with special groups of children, by Bernard B. Braen and Joseph M. Masling. *Exceptional Children*. Sept., 1959. 26:1:42-45.

A discussion of the unique problems involved in the evaluation of intelligence in the physically handicapped, the verbally educationally handicapped, and the very young child. Categories cover specifically the blind, the deaf, the orthopedically handicapped, those with speech, reading, and writing defects, the non-English-speaking child, the illiterate, the infant, and the preschool child. The authors made a questionnaire survey of psychologists working in the field to determine the frequency with which various tests designed for use with these children were being employed in clinical practice. Data are given on the use of the five most often reported tests in the nine categories of handicapping conditions. (For complete listing of all tests mentioned, showing reported frequency of use, write to the authors.) The implications of the tests used and the procedures employed are discussed.

# PSYCHOLOGY

See p. 322; 832; 849; 875.

# PUBLIC ASSISTANCE—ILLINOIS

857. Irwin-Grout, Temple (*Scott County Dept. of Public Aid, Winchester, Ill.*)

The Scott County Rehabilitation Program; building on the ingenuity and creativity of recipients and community in developing county rehabilitation services. *Public Aid in Ill.* Aug., 1959. 26:8:3-12.

In same issue: Rehabilitation—1965, Otto L. Bettag. p. 13-15.

Several years ago Scott County was one of several selected for a pilot study of the needs of older people by the Illinois Public Aid Commission. Sparked by the imaginative leadership of the author, Scott County Superintendent of Public Aid, public welfare personnel utilized community resources in the cooperative planning of rehabilitation services. Various projects included in the over-all program included therapy in a local nursing home, inservice training program for staffs of nursing homes, the development of a sheltered or boarding home for nursing home patients who had sufficiently improved, a workshop project for unemployed older persons, a rehabilitation committee that works with public welfare clients, and professional workshops for personnel involved

## ABSTRACTS

in the program. Coordination of services of the Division of Vocational Rehabilitation and the Public Aid Commission by the Rehabilitation Committee has resulted in improved services and prevention of duplication of services and costs. Some statistical data from the study are included.

Dr. Bettag, Director of the Illinois Department of Public Welfare (Springfield), discusses the particular services of his department that relate to rehabilitation—those for the mentally retarded, the deaf, the blind, and the physically handicapped. Counseling for the mentally ill and vocational training programs at several state hospitals have proved so effective that Dr. Bettag hopes by 1965 to have established rehabilitation departments in all state mental hospitals and schools.

## READING—EQUIPMENT

See p. 330.

## REHABILITATION

### 858. Iowa. University. College of Medicine

(Symposium on rehabilitation). *J. Iowa State Med. Soc.* Apr., 1959. 49:4:198-220.

Contents: The State University of Iowa Rehabilitation Center.—The role of medicine in rehabilitation, Carroll B. Larson.—The medical rehabilitation of rheumatoid arthritis, W. D. Paul.—Rehabilitation in neurology, David Green.—Rehabilitation of some visually handicapped patients, A. E. Braley (and others).—Surgical rehabilitation for hearing impairment, C. M. Kos.—The State Division of Vocational Rehabilitation; an additional tool for the practicing physician, Ray Wittrig.

The main portion of this issue of the *Journal* of the Iowa State Medical Society is given over to articles discussing general and specific rehabilitation problems in a variety of disabilities. Resources within the state for rehabilitation services are discussed in the first and last articles of the series.

Editor of the *Journal* is Everett M. George, M.D., 529 36th St., Des Moines 12, Iowa.

### 859. Military Med. Sept., 1959. 124:9.

Entire issue devoted to Panel on Rehabilitation, presented at the 65th annual convention of the Association of Military Surgeons of the U. S., Washington, D. C., Nov. 17-19, 1958.

Contents: Introduction, Charles D. Shields.—Physical medicine in the Army; history and development, A. F. Mastellone.—Physical standards; evaluation of fitness for duty; pension, Clark Meador.—Rehabilitation; plastic prostheses, V. J. Niiranen.—Dynamic physical medicine and rehabilitation in the Veterans Administration, Louis B. Newman.—Rehabilitation and cancer, Murray M. Copeland.—The effect of the changing picture in the treatment of tuberculosis on rehabilitation programs, Harry E. Walkup.—Psychiatric rehabilitation, Oreon K. Timm.—Rehabilitation of the amputee, Frederick E. Vultee.

*Military Medicine* is the official publication of the Association of Military Surgeons of the United States, Suite 718, 1726 Eye St., N.W., Washington 6, D.C. The current issue is priced at 75¢.

## REHABILITATION—MAINE

860. Hawley, (Mrs.) Warren F., Jr. (616 High St., Bath, Maine)

Crippled children can be helped. *J. Maine Med. Assn.* Mar., 1959. 50:3:89-96.

A description of the physical facilities and services of Hyde Memorial Rehabilitation Hospital, Bath, Me., maintained and operated by the Pine Tree Society for Crippled Children and Adults, an Easter Seal agency. A 51-bed residential hospital, it also serves as an outpatient treatment center for both children and adults. The author, speech therapist at the Hospital, published this article to acquaint medical personnel throughout the state with the services offered for the rehabilitation of handicapped children.

## REHABILITATION—PROGRAMS

### 861. Robert, J.

Réalizations médico-sociales Suédoises en faveur de l'enfance physiquement inadaptée. *Courrier.* June, 1959. 9:6:329-343.

Medical and social provisions for handicapped children in Sweden are described, as well as problems of hospital organization, education, and vocational guidance for children with orthopedic disability, epilepsy, asthma, diabetes, tuberculosis, blindness, and deaf-mutism. A new experiment in special education—a unified 9-year school system—is briefly described. In conclusion, recommendations for educational reforms that would benefit handicapped children in France are discussed. At present only 40,000 of the 400,000 handicapped children in France attend school. Text of the article is in French, with English and Spanish résumés.

## REHABILITATION CENTERS—DESIGNS AND PLANS

862. Haldeman, Jack C. (Div. of Hosp. and Med. Facilities, U.S. Public Health Service, Washington 25, D.C.)

Elements of a multiple disability rehabilitation facility, by Jack C. Haldeman and Thomas P. Galbraith. *Hospitals.* Sept. 1 & 16, 1959. 33:17 & 18. 2 pts.

Part I discusses the planning of facilities for central administrative services and evaluation and treatment services (medical, dental, physical, and occupational therapy). Also included are the master floor plan for the rehabilitation center and plans for treatment rooms (hydrotherapy, thermotherapy, and massage and occupational therapy). The layout of rehabilitation gymnasiums for adults and children is sketched. Those planning rehabilitation centers will also find useful the equipment lists given for the various treatment rooms and gymnasiums. In Part II the facilities for teaching activities of daily living, for the psychological service and for the medical, social, and vocational services are discussed. Equipment lists are included for the units planned for teaching daily living activities and for the prevocational training program. Miscellaneous facilities and general requirements to be incorporated in building plans are mentioned briefly. Guide lines for estimating size of the rehabilitation center to meet specific needs of the community should be helpful.



## SHELTERED WORKSHOPS—MARYLAND

863. Maryland Society for Mentally Retarded Children. Greater Baltimore Chapter. Sheltered Workshop (2438 Greenmount Ave., Baltimore 18, Md.)

*Occupational Training Center for the Mentally Retarded; grant study progress report to Office of Vocational Rehabilitation . . . January 1, 1959, thru June 30, 1959 . . .* Baltimore, The Sheltered Workshop, 1959. 8 p. floor plan. (Project no. R. D. #373) Mimeo.

The Sheltered Workshop for the Retarded, the only agency within the state to provide vocational evaluation and sheltered workshop experiences for the retarded, was established in 1957. Since January of this year it has served as a demonstration project under a grant from the Office of Vocational Rehabilitation; all referrals to the workshop come from the State Division of Vocational Rehabilitation. Described are intake procedures, prevocational evaluation and personal adjustment training, payroll policies, types of work supplied through subcontracts, population characteristics, and placement results. The final section of the report summarizes plans formulated for continuing services in the workshop.

The report is available from Mr. Jerome Menchel, Project Director of the Sheltered Workshop.

## SHELTERED WORKSHOPS—ADMINISTRATION

864. Feintuch, Alfred (*Jewish Vocational Service, Montreal, Canada*)

Case studies from a generic workshop. *J. Rehab.* July-Aug., 1959. 35:15-17.

In same issue: Making contacts for contracts, Jerome Menchel. p. 17.

The generic workshop, serving clients with different types of disabilities as opposed to the specific disability workshop, may have an increasingly important role in the vocational rehabilitation field. Smaller communities may find the operation of a generic workshop more feasible due to difficulties arising from financing and staffing. The author offers some brief case studies representative of the variety of clients served in the generic workshop operated by the Jewish Vocational Service of Montreal, to illustrate how clients of markedly different age, background, and disability functioned well together.

The article by Mr. Menchel (2438 Greenmount Ave., Baltimore 18, Md.) discusses administrative problems in the securing of subcontracts for retarded young adults employed in a sheltered workshop located in a city with over half a million population. (For further information on the operation of this workshop, see this issue of *Rehab. Lit.*, #863.)

See also 876.

## SPECIAL EDUCATION—EUROPE

See 861.

## SPECIAL EDUCATION—LOUISIANA

865. Cousins, Michael J. (*Special Education Center, Northwestern State Coll., Natchitoches, La.*)

Education of exceptional children in Louisiana; the diagnostic process. *La. Welfare.* July, 1959. 18:1:14-19.

Special education centers have been established in Lou-

isiana at state colleges to offer aid to exceptional children, their parents, and teachers. Working closely with school systems in the surrounding areas, the centers provide diagnostic and consultation services. The diagnostic team consists of a psychologist, educational consultant, speech and hearing specialist, and social worker. The social worker functions as case manager, interviewing parents while other personnel evaluate the child. Decisions about recommendations for the child are left entirely in the hands of the parents and the school. Experience with the program has proved the value of early diagnosis, parent participation, and awareness on the part of school personnel of the special needs of exceptional children.

## SPECIAL EDUCATION—PORTUGAL

866. Taylor, Wallace W. (*N.Y. Univ. College for Teachers, Albany, N.Y.*)

The education of physically handicapped children in Portugal, by Wallace W. and Isabelle Wagner Taylor. *Exceptional Children.* Sept., 1959. 26:1:22-28.

The third of a series of articles on the education of physically handicapped children in countries of Western Europe, it follows the same format as previous ones, relating briefly general information concerning Portugal, the problems to be met, and the services provided. Sections are devoted to incidence of disability, types of services provided, teacher training, the administration and organization of services, and the role of governmental and voluntary agencies in the development of special education. For annotations of the first two articles, on special education in Finland and Austria, see *Rehab. Lit.*, July, 1959, #594, and Aug., 1959, #685.

## SPEECH CORRECTION

867. Luse, Eleanor M. (*Speech Clinic, Univ. of Vermont, Burlington, Vt.*)

The child who is slow to speak. *Elementary School J.* Oct., 1959. 60:1:26-31.

Dr. Luse notes that the classroom teacher who understands some of the causes of delayed speech in children is better able to plan a program for improving the child's communication skills. She describes personality types in children who appear to have speech disorders. The conscientious teacher will make use of speech correction resources in the school or community to aid the child and she will devise ways of stimulating and motivating the child to speak. Often home patterns are barriers to the development of speech in children.

See also 816; 826.

## SPEECH CORRECTION—RESEARCH

868. American Speech and Hearing Association

*Research needs in speech pathology and audiology; a special report prepared by the Committee on Research . . . with the support and cooperation of the . . . Office of Vocational Rehabilitation and the Veterans Administration.* Washington, D.C., The Assn., 1959. 78 p.

A review of the biological, psychological, and acoustical research needs in the field of speech and hearing, as reported by subcommittees of the American Speech and Hearing Association's Committee on Research. Attention was directed to problems related to articulation, laryngec-

## ABSTRACTS

tomy, stuttering, rate and fluency, cleft palate, aphasia, cerebral palsy, mental retardation, delayed speech and language development, hearing problems in children, adults, and large groups, and basic research in speech and hearing. Administrative problems in speech pathology and audiology also were considered. Investigation of research needs was conducted through: 1) a survey of published abstracts to determine past research efforts, 2) a questionnaire study of areas causing practicing clinicians the most concern, and 3) conferences of specialists in each problem area for the purpose of reviewing their respective research needs.

Drs. Wendell Johnson and Theodore D. Hanley summarize the main findings of the subcommittee reports and offer recommendations for intensified research efforts in the field.

Available from Kenneth O. Johnson, Executive Secretary, American Speech and Hearing Association, 1001 Connecticut Ave., N.W., Washington 6, D.C.

## SPINAL CORD—MEDICAL TREATMENT

869. Freeman, Leslie W. (*Indiana Univ. School of Med., 1100 W. Michigan St., Indianapolis 7, Ind.*)

First aid and transportation for patients with spinal cord injuries. *J. Am. Med. Assn.* Sept. 5, 1959. 171:1:54-56. Guest editorial.

Dr. Freeman points out that incidents surrounding the early handling of the patient with spinal cord injury may well determine the ultimate functional result that can be expected. Techniques for moving and transporting such patients from the scene of the accident are discussed. The vigilance exercised during the initial stages of aid and transportation should be continued after admission of the patient to the hospital. Immediate surgery is often indicated; closed manipulation of bone realignment has no place in the treatment of spinal cord injuries. Teamwork by specialists in various fields can aid these patients in rehabilitation and return to the community.

## SPINE INJURIES

870. American Congress of Physical Medicine and Rehabilitation

Head, neck and arm symptoms subsequent to neck injuries; panel discussion presented at the Thirty-sixth Annual Session of the . . . *Arch. Phys. Med. and Rehab.* Sept., 1959. 40:9:371-389, 393-395.

Contents: Radiologic aspects of moderately severe cervical spine trauma, Martin S. Abel.—Range of mobility of the cervical spine, Frederic J. Kottke and Martin O. Mundale.—The structural injuries, Ruth Jackson.—Head, neck and arm symptoms subsequent to neck injuries: physical therapeutic considerations, David Rubin.—Special orthopedic diagnostic and therapeutic considerations, Harvey E. Billig, Jr.

## SPORTS

871. L'Etang, H. C. J. (*25 Connaught Mansions, Prince of Wales Dr., Battersea, London, S.W. 11, England*)

Some more "disabled" sportsmen. *Practitioner.* June, 1959. 182:755-758.

Further study by the author (see *Rehab. Lit.*, April, 1956, #455) has revealed that disabilities of varying de-

gree are relatively common among sportsmen, as they are in the population as a whole. Examples cited are defective vision and hearing, muscular paralysis and wasting, sensory and trophic disturbances, amputation of upper and lower extremities, chronic disease, and serious medical conditions, some requiring surgery. Many famous athletes have made remarkable adaptations to disabilities, causing the author to believe that the threshold for "disability" might be raised considerably. Such findings have implications in the field of disability determination.

## SURGERY

See 821.

## SURGERY (PLASTIC)

872. Morani, Alma Dea (*255 S. 17th St., Philadelphia 3, Pa.*)

Plastic surgery in the adolescent. *Pa. Med. J.* Sept., 1959. 62:9:1321-1323.

Increasing awareness of the psychological significance of external physical defects and advances in technics of plastic surgery are responsible for the restoration of many young patients to normal or near normal appearance. Congenital defects should be repaired before school age but later correction during adolescence can also be satisfactory. Types of deformities amenable to surgery are listed and special emphasis is placed on the necessity for evaluating the patient's mental attitude and emotional reaction to his deformity. Brief suggestions for the management of adolescent patients undergoing plastic surgery are given. An extensive bibliography accompanying the article was omitted from the *Journal* but is available on request to its office, 230 State St., Harrisburg, Pa.

## VOCATIONAL GUIDANCE

873. Federation Employment and Guidance Service (*42 E. 41st St., New York 17, N.Y.*)

An intensive vocational counseling program for slow learners in high school; report of a special project for boys and girls in tenth and eleventh grade modified English classes. . . . New York, The Service, 1959. 56 p. tabs.

Conducted under a grant from the New York Fund for Children, this study was an attempt to develop technics in counseling with "underachieving" children needing orientation and assistance in preparation for their eventual entry into the working world. Intensive and individualized vocational counseling services included personal interviews, psychological testing, occupational advice, and part-time employment, as well as field trips, group vocational guidance once a week for a double period (80 minutes), and discussions with parents and teachers by counseling staff members. Findings and extensive data compiled in evaluating the project's effectiveness are given. The counseling services helped students achieve greater maturity and realism in vocational planning. (For another of the Federation's recent publications, see this issue of *Rehab. Lit.*, #822.)

874. Lofquist, Lloyd H. (*2521 W. 55th St., Minneapolis 10, Minn.*)

An operational definition of rehabilitation counseling. *J. Rehab.* July-Aug., 1959. 35:4:7-9, 24-25.

In attempting to define vocational counseling in specific



terms that relate to practical and effective procedures the rehabilitation counselor may wish to consider for use, the author states that this type of counseling is not a specialty separate from counseling psychology. The counselor in this field needs all the usual technics with additional knowledge of a medical and paramedical nature. Vocational counseling is seen as a "continuous learning process involving interaction in a nonauthoritarian fashion between two individuals whose problem-solving efforts are oriented toward vocational planning." These factors in relation to effective counseling are discussed in detail. A conclusion offered is that perhaps the counselor should master the vocational planning area and leave to others the functions of the psychiatrist, clinical psychologist, and social worker.

**875. Marra, Joseph L.** (*Bur. of Voc. Rehab., Conn. State Dept. of Education, Hartford, Conn.*)

Family problems in rehabilitation counseling, by Joseph L. Marra and Frederick W. Novis. *Personnel and Guidance* J. Sept., 1959. 38:1:40-42.

Fifty-two disabled clients of the Connecticut Bureau of Vocational Rehabilitation, all married, under 50 years of age, and with at least one child, were questioned concerning the effects of their disability on themselves and their families. Since disability results in change in the functional roles of family members, counselors should be aware of crucial areas in family relations when working with clients and their families. Resources for alleviating financial hardships and for family welfare services should be explored. A broader approach to rehabilitation planning that includes working with family members as well as with the disabled husband can result in better adjustment of all members of the family group.

**876. Rudd, J. L.** (*481 Beacon St., Boston 15, Mass.*)

Medical and vocational cooperation in a geriatric workshop, by J. L. Rudd and S. Norman Feingold. *J. Am. Geriatrics Soc.* Apr., 1959. 7:4:349-359.

Describes the administration of a Work Adjustment Center under the auspices of a private vocational service agency. A majority of the patients served are geriatric; many are handicapped and have been "psychotic" at one time or another. Both categories represent groups that are most difficult to rehabilitate and place. The Work Center provides the means of assessing the client's work behavior when it cannot be gauged by other technics. The authors stress the importance of the physician's assuming a more active role in work adjustment centers. A rating chart for recording the individual's ability to endure certain environmental factors and to perform functional activities on the job is included. Activities of the Work Center are described, as well as the duties and qualifications of personnel administering the program.

**877. Watkins, Arthur L.** (*Massachusetts General Hosp., Boston 14, Mass.*)

Prevocational evaluation and rehabilitation in a general hospital. *J. Am. Med. Assn.* Sept. 26, 1959. 171:4:385-388.

Experiences at Massachusetts General Hospital, an acute general hospital with a rehabilitation clinic, have proved the value of prevocational testing and work therapy in

achieving successful rehabilitation of injured workmen. Nonprofessional services of the hospital provided actual work situations where patients' work tolerance and aptitudes were evaluated. Of 41 injured workers who completed the evaluation and work therapy program, 75 percent were successfully rehabilitated and returned to employment. The program was under the direction of the rehabilitation team of the general hospital center. Patient data are analyzed and three typical case histories included.

**878. Williams, Elsa H.** (*Dr. Cantoni, Wayne State Univ., Detroit 2, Mich.*)

Special program for the severely disabled, by Elsa H. Williams and Louis J. Cantoni. *J. Rehab.* July-Aug., 1959. 35:4:20-21.

A special rehabilitation program for 116 severely disabled persons was provided from March, 1955, through June, 1956; funds to underwrite the program came mainly from two federal project grants. The program was administered cooperatively by the Michigan Division of Vocational Rehabilitation and the Rehabilitation Institute of Metropolitan Detroit. This brief report presents follow-up data on the 116 clients originally picked for the projects. Of this group 90 were actually chosen to receive vocational rehabilitation services. As of February, 1958, 61 of the 90 were considered vocationally rehabilitated, with 49 remuneratively employed. Characteristics of the group, physical status, and types of jobs held are mentioned. Factors responsible for failure of the remaining 29 clients to achieve vocational rehabilitation are considered. Personal counseling with the severely disabled is vital to success in vocational counseling and rehabilitation. Currently the Rehabilitation Institute has expanded its vocational counseling staff and services to include psychological testing and prevocational evaluation. Referral and placement services are provided by a third counselor.

## WORKMEN'S COMPENSATION

**879. International Association of Industrial Accident Boards and Commissions**

*Workmen's compensation problems, 1958; proceedings, 44th annual convention of the . . .* Washington, D.C., Govt. Print. Off., 1959. 212 p. tabs. (*U.S. Bur. of Labor Standards, Bul. 201*).

Contains committee reports, papers, reports of panel discussions, and statistical information on workmen's compensation. A problem of growing importance—radiation injuries in relation to compensation—received considerable attention. Of special interest is the section containing the report of the Rehabilitation Committee; a 7-page bibliography on sources of rehabilitation information is included. Panel discussions were held on back injuries and on the evaluation of cardiacs' work potential. Legislative changes during 1958 in Canada and the United States were cited. Dr. Thomas J. Cauty contributed a paper on amputee rehabilitation and modern artificial limbs.

The address of the President of IAIABC Elmer H. Kennedy was digested in the October issue of *Rehab. Lit.* (see #771).

Available from U.S. Superintendent of Documents, Washington 25, D.C., at 60¢ a copy.



## Events and Comments

(Continued from page 334)

### Dr. Masland Becomes Director of NINDB

DR. RICHARD L. MASLAND, since 1957 assistant director of the National Institute of Neurological Diseases and Blindness, Bethesda, Md., has been named director, replacing Dr. Pearce Bailey. Dr. Bailey has been appointed director of the Institute's new international neurological research programs and will maintain liaison with the World Federation of Neurology. Dr. Masland was responsible for the development of the Institute's perinatal project, a study of neurological and sensory disorders of the new-born. A diplomate of the American Board of Neurology and Psychiatry, Dr. Masland was formerly professor of psychiatry and neurology, in charge of neurology, Bowman-Gray School of Medicine.

### New Modern Building Constructed at Jamestown Crippled Children's School

IN AUGUST construction of a quarter-million-dollar building was completed at the Jamestown (N. Dak.) Crippled Children's School. The building's modern equipment and facilities enabled the school to expand its program this fall, with training in industrial arts and vocational evaluation offered for boys and homemaking for girls.

### Journal of Mental Deficiency Research Names U.S. Sales Agent

THE SEMIANNUAL *Journal of Mental Deficiency Research*, published by the National Society for Mentally Handicapped Children, London, England, is now available through a sales agent in the United States. The *Journal* may be ordered from: R. W. Ellicott, Agent, Journal of Mental Deficiency Research, Box 143, Owings Mills, Md. The subscription rate is \$4.50 a year.

### Dr. P. V. Doctor Comments on Deafness in the Twentieth Century

"THERE IS ONE new aspect in the field of deafness that needs careful scrutiny, and that is in the field of multiple handicaps. We list six groups in the *American Annals of the Deaf*: the aphasic and deaf, the mentally retarded and deaf, the crippled and deaf, the brain injured and deaf, the deaf-blind, and the cerebral palsied and deaf. Each year the number of such pupils reported becomes larger. It may be that this situation is brought about by better diagnostic services, or that, educationally, we are becoming more aware of such problems. It may also very well be that medicine in the 20th century is saving the lives of many multiple handicapped deaf boys and girls, who, twenty-five years ago, would have been in the graveyard. So many older teachers of

the deaf remark that twenty-five years ago they taught a deaf child, now they teach a child who is deaf and something else, and generally the something else is as serious as the deafness. Difficult as it is to secure teachers of the deaf, imagine how much more difficult it is to find a teacher for the multiple handicapped child, who may very well be the great problem in the field of deafness in the 20th century. The medical field is doing an excellent job in saving lives, but the teaching profession has become much more complex because of it. Is a relatively uneducated multiple handicapped child going to be one of the end products of this modern twentieth century?"—From "Deafness in the Twentieth Century," by Pourie Vaux Doctor, Ph.D., in *American Annals of the Deaf*, Sept., 1959, p. 333.

### Twenty Years of Federal-State Children's Program Reviewed

DURING ITS FIRST 20 years, the crippled children's program carried on through a state-federal partnership, established by the Social Security Act of 1935, increased the number of handicapped children served from 110,000 in 1937 to 313,000 in 1957. The rate per 1,000 child population was 2.4 in 1937 and 4.7 in 1957.

The states define crippling conditions they will accept for treatment (on the basis of financial and medical resources) and operate through single state official agencies, utilizing hospitals and other treatment centers. The federal government, through the Children's Bureau, offers the states consultation, gathers facts about new methods of treatment, assists in the service of children, and helps finance the training of workers.

Between 1950 and 1957 children treated for epilepsy increased 387 percent, for eye conditions 234 percent, for diseases of the nervous system and sense organs 162 percent, and for congenital malformations 80 percent. In 1950 only about 2,200 with congenital heart malformations received service in the program; by 1958, because of rapid developments in diagnosis and treatment in this disease, more than 12,000 were aided.

The crippled children's program is assisting in establishing and expanding programs for amputees. Thirty states have reported to the Children's Bureau that they have slightly more than 2,000 children lacking one or more limbs or parts of limbs who could benefit from prosthetic devices and training.

The average hospital stay per child served is decreasing but the average cost per hospital day is still rising. In 1937, children averaged a hospital stay of 43.6 days; in 1957 they stayed an average of 24.4 days. From 1945 to 1957, the average cost per hospital day went up almost 200 percent, from \$8.95 to \$26.81.

### NRA Awards Grants for Study of Recreation for Handicapped

THE CONSULTING SERVICE on Recreation of the National Recreation Association, 8 W. Eighth St., New York 11, recently made its first grants, totaling \$10,000, for graduate education in recreation for the ill and handicapped. Four of the five grants were for study on the master's level. In the advanced program, a grant of \$3,000 was awarded to Richard Lyon Ramsay. He will work for an advanced degree of Specialist in Recreation at Teachers College, Columbia University. Applications for graduate assistance for the academic year 1960-1961 will be accepted until March 15, 1960.

### National Index on Deafness, Speech, and Hearing Established

GALLAUDET COLLEGE and the American Speech and Hearing Association have established a National Index on Deafness, Speech, and Hearing, to be located at the College. Current and past literature will be indexed and abstracted and made available in a regular professional publication. The Index was made possible in part by a grant from the Office of Vocational Rehabilitation.

### NIH Grants for Research and Construction Reported

DURING THE FISCAL year ending June 30, 1959, the National Institutes of Health awarded 9,377 grants totaling \$174,640,724 for research and for construction of research facilities in nonfederal institutions. Detailed information on the character, distribution, and amounts involved is contained in a 318-page summary recently issued, *Public Health Service Grants and Awards by the National Institutes of Health, Fiscal Year 1959*, Public Health Service pub. no. 701, Part I (U.S. Superintendent of Documents, Washington 25, D.C., \$1.00).

A total of 9,166 research projects concerned with major diseases and various basic problems in the medical and biological sciences were granted \$142,627,730, about four-fifths of the total. The grants were made to 887 institutions in 49 states, the District of Columbia, 2 territories, and 33 foreign countries. In the area of arthritis and metabolic diseases, 1,406 research project grants were made, totaling \$18,828,522; for heart disease, 1,571 totaling \$25,069,871; for neurological diseases and blindness, 1,009 totaling \$17,021,566.

Grants to help build, equip, or expand 211 research facilities, totaling \$32,012,994, were awarded on a matching basis to 153 institutions throughout the country.

## Author Index

- Abel, Martin S., 870  
 Allen, Robert M., ed., 831  
 Am. Congress of Physical Medicine and Rehabilitation, 870  
 Am. Public Health Assn., 833  
 Am. Speech and Hearing Assn., 868  
 Appleby, William, 837  
 Archerd, Mary, 836  
 Arthur, Bettie, 828  
 Bawden, Francis, 836  
 Beier, Delton C., 840  
 Bergman, Moe, 820  
 Bettag, Otto L., 857  
 Bice, Harry V., 841  
 Billig, Harvey E., Jr., 870  
 Blackman, Leonard S., 844  
 Blumberg, Marvin L., 814  
 Bottom, Donald W., 836  
 Boyle, Robert W., 847  
 Braen, Bernard B., 856  
 Braley, A. E., 858  
 Breslow, Lester, 833  
 Burrell, James, 837  
 Cantoni, Louis J., 878  
 Capobianco, Rudolph J., 843  
 Chapman, Eugene H., 854  
 Clarke, David H., 838  
 Cole, Jonathan O., ed., 819  
 Connor, Leo E., 835  
 Copeland, Murray M., 859  
 Cousins, Michael J., 865  
 Cross, Alfred J., 820  
 Cunningham, Florence, 853  
 De Angelis, Gerard J., 820  
 De Schweinitz, Louise, 834  
 Ebel, Alfred, 827  
 Eichorn, John R., 845  
 Federation Employment and Guidance Service (New York), 822, 873  
 Feingold, S. Norman, 876  
 Feintuch, Alfred, 864  
 Fishman, Sidney, p. 322  
 Fowler, Edmund Prince, Sr., 820  
 Freeman, Leslie W., 869  
 Galbraith, Thomas P., 862  
 Gartrell, Virginia, 836  
 Gerard, Ralph W., ed., 819  
 Gibbons, Helen, 853  
 Gibbs, Norah, 832  
 Giles, Robert T., Jr., 837  
 Gilroy, Regina V., 820  
 Gleason, Clyde, 815, 837  
 Green, David, 858  
 Griffin, Harry F., 836  
 Guttmann, L., 851  
 Haldeman, Jack C., 862  
 Hawley, Mrs. Warren F., Jr., 860  
 Hellender, Arthur, 837  
 Heller, Robert, 836  
 Hindman, Darrell A., 817  
 Hiyeda, Masatora, 823  
 Holtzman, Milton, 827  
 Hoss, Marvin, 836  
 Industrial Home for the Blind (Brooklyn), 820  
 Internatl. Assn. of Industrial Accident Boards and Commissions, 879  
 Iowa University. College of Medicine, 858  
 Irwin-Grout, Temple, 857  
 Jackson, Ruth, 870  
 Johnson, Ernest W., 829  
 Johnson, G. Orville, 843  
 Jordan, W. K., 818  
 Kau, Bernard, 836  
 Knobloch, Hilda, 855  
 Kolbrenner, Louis, 820  
 Kos, C. M., 858  
 Kottke, Frederic J., 870  
 Larson, Carroll B., 858  
 Ledbetter, John, 836  
 L'Etang, H. C. J., 871  
 Lilienfeld, Abraham M., 833  
 Loban, Lawrence N., 837  
 Lofquist, Lloyd H., 874  
 Luse, Eleanor M., 867  
 McNamee, H. T., 836  
 Marks, Morton M., 816  
 Marra, Joseph L., 875  
 Maryland Soc. for Mentally Retarded Children. Greater Baltimore Chapter. Sheltered Workshop, 863  
 Masling, Joseph M., 856  
 Mastellone, A. F., 859  
 Meador, Clark, 859  
 Menchel, Jerome, 864  
 Michels, Eugene, 839  
 Miller, C. Arden, 834  
 Miller, June B., 834  
 Miller, Paul R., 829  
 Mitchell, Harry R., 836  
 Mitchell, Joyce, 850  
 Morani, Alma Dea, 872  
 Morantz, Isadore, 836  
 Mundale, Martin O., 870  
 Newman, Louis B., 859  
 Nieman, Dorothy E., comp., p. 330  
 Niiranen, V. J., 859  
 Novis, Frederick W., 875  
 Olson, Robert E., 833  
 Panin, Nicholas, 827  
 Pasamanick, Benjamin, 833  
 Paterson, John C. S., 833  
 Paul, W. D., 858  
 Poser, Charles M., 830  
 Potts, Willis J., 821  
 Quirk, Agnes, 836  
 Ragsdale, Herrington L., 836  
 Ram, M. J., 832  
 Rapin, Isabelle, 826  
 Rideout, George M., 852  
 Riepenhoff, John P., 829  
 Riordan, John R., 852  
 Robert, J., 861  
 Roth, Grace M., 848  
 Rubin, David, 870  
 Rudd, J. L., 876  
 San Francisco State College, 837  
 Schafer, Philip, 837  
 Shields, Charles D., 859  
 Shontz, Franklin C., 849  
 Soares, George J., 836  
 Stanley, Lyman, 836  
 Tarjan, George, 842  
 Taylor, Isabelle Wagner, 866  
 Taylor, Martha L., 816  
 Taylor, Wallace W., 866  
 Timm, Oron K., 859  
 Tobis, Jerome S., 825  
 U.S. Naval Hospital. Amputation Center (Oakland, Calif.), 824  
 U.S. Public Health Service, 846  
 Vultee, Frederick E., 859  
 Walkup, Harry E., 859  
 Waring, Dwight S., Jr., 836  
 Watkins, Arthur L., 877  
 Weinstein, Emanuel, 836  
 Williams, Elsa H., 878  
 Wittrig, Ray, 858  
 Wood, William S., 836  
 Wysong, George E., 836  
 Zable, Irene, 837